26972

SEARCH REQUEST FORM

Requestor's Name:	Borl	Serial Number: 16.166.79
Date:	Phone: 47/8	Art Unit: <u>'62V</u>

Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevent citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevent claim(s).

$$(CH2)_{m} - (CH2)_{m}$$

$$M = 1-6$$

1136

STAFF USE ONLY

Date completed: 10.03-02	Search Site	Vendors
Searcher: <u>Sever1, @ 499</u> 4	STIC	IG
Terminal time:	CM-1	STN
Elapsed time:	Pre-S	Dialog
CPU time:	Type f Search	APS
Total time:30	N.A. Sequence	Geninfo
Number of Searches:	A.A. Sequence	SDC
Number of Databases:	Structure	DARC/Questel
	Bibliographic	Other

[(FILE 'REGISTRY' ENTERED AT 15:01:11 ON 03 OCT 2002) L1

CH ∨ OH CH2~Cb~NO2 C~~0 @17 18 21 22 @15 16 @20 26 G4 CH2-\(C == CH2 0 @23 24 25 ∨0~ G2 ^ C¬ 11 12 13 14

VAR G1=15/17 VAR G2=20/23 REP G3=(1-6) CH2 VAR G4=H/CH3 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM GGCAT IS UNS AT 10 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE

3 SEA FILE=REGISTRY SSS FUL L1 _L3

3 ANSWERS 100.0% PROCESSED 7 ITERATIONS

SEARCH TIME: 00.00.03

FILE 'HCAPLUS' ENTERED AT 15:08:51 ON 03 OCT 2002 L42 S L3

ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS L42002:449689 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 137:33162 TITLE: Process for the preparation of p-nitrobenzyl or

allyl esters of 3-cyclic-ether substituted cephalosporins from trimethylphosphinic

compounds via an intramolecular Wittig reaction

Colberg, Juan Carlos; Tucker, John Lloyd; INVENTOR(S):

Zenoni, Maurizio; Fogliato, Giovanni; Donadelli,

Alessandro

PATENT ASSIGNEE(S): Pfizer Products Inc., USA SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

Shears 308-4994 Searcher :

APPLICATION NO. DATE DATE PATENT NO. KIND _____ ______ ____ _____ WO 2001-IB2181 20020613 20011119 WO 2002046199 A1 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2002-23929 20011119 AU 2002023929 A5 20020618 A1 · 20020725 US 2001-6579 20011204 US 2002099205 US 2000-251018P Ρ 20001204 PRIORITY APPLN. INFO.: WO 2001-IB2181 W 20011119 CASREACT 137:33162; MARPAT 137:33162 OTHER SOURCE(S):

GI

A process for the prepn. of I (R1 = p-nitrobenzyl, allyl; X = halo) AΒ via an intramol. Wittig reaction of II (R1 = p-nitrobenzyl, allyl; R2 = C1-6-alkyl, C6-10-aryl, C6-10-aryl-C1-6-alkyl, dithianyl) to prep. 3-cyclic-ether substituted derivs. of cephalosporins is described. Thus, III was treated with p-nitrobenzyl glyoxylate monohydrate followed by redn. of the intermediate with NaBH4. The resulting hydroxy compd. was treated with p-toluenesulfonic acid followed by addn. of (S)-1-(tetrahydro-2-furanyl) ethanone, addn. of thionyl chloride, and finally trimethylphosphine to give the desired intermediate II (R1 = p-nitrobenzyl, R2 = PhCH2). Cyclization of II via an intramol. Wittig reaction was accomplished by refluxing for 16 h in THF. Addn. of phosphorus pentachloride and .alpha.-picoline in dichloromethane gave the free amine of I (R1 = p-nitrobenzyl). 436100-73-1P 436100-78-6P 436800-40-7P IT

III

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic

Absolute stereochemistry.

Absolute stereochemistry.

Absolute stereochemistry.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:449688 HCAPLUS

DOCUMENT NUMBER: 137:33161

TITLE: Coupling process and intermediates useful for

preparing cephalosphorins

INVENTOR(S): Colberg, Juan Carlos; Donadelli, Alessandro;

Fogliato, Giovanni; Zenoni, Maurizio

PATENT ASSIGNEE(S): Pfizer Products Inc., USA SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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APPLICATION NO.
        PATENT NO.
                                    KIND DATE
                                                                         _____
                                               _____
                                                                WO 2001-IB2225 20011122
        WO 2002046198 A1 20020613
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                     CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY,
                      KG, KZ, MD, RU, TJ, TM
               RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
                      SN, TD, TG
        AU 2002023943
                                    A5
                                                20020618
                                                                          AU 2002-23943
                                                                                                       20011122
                                                                     US 2000-251014P P 20001204
WO 2001-IB2225 W 20011122
PRIORITY APPLN. INFO.:
                                         MARPAT 137:33161
OTHER SOURCE(S):
```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

This invention relates to a novel process for the prepn. of 3-cyclic-ether-substituted cephalosporins, such as I [CO2R1 =carboxylic acid or a carboxylate salt; Al = aryl, heteroaryl, heterocyclyl; A2 = H, alkyl, cycloalkyl, aryl, etc.], via amidation reactions. Thus, cephalosporin II was prepd. in 80% yield by amidation of amine III with the acid anhydride of acid IV using O,O-di-Et hydrogenphosphorothioate in a Me2CO/H2O soln.

IT 436100-73-1P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (process for the prepn. of intermediates via amidation which are useful for prepg. cephalosphorins)

RN 436100-73-1 HCAPLUS

CN 4-Thia-2,6-diazabicyclo[3.2.0]hept-2-ene-6-acetic acid, .alpha.-hydroxy-7-oxo-3-(phenylmethyl)-, (4-nitrophenyl)methyl

ester, (1R,5R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 436100-78-6

> RL: RCT (Reactant); RACT (Reactant or reagent) (process for the prepn. of intermediates via amidation which are useful for prepg. cephalosphorins)

436100-78-6 HCAPLUS RN

4-Thia-2,6-diazabicyclo[3.2.0]hept-2-ene-6-acetic acid, CN .alpha.-hydroxy-7-oxo-3-(phenylmethyl)-, 2-propenyl ester, (1R,5R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

FILE 'CAOLD' ENTERED AT 15:09:16 ON 03 OCT 2002 L5 0 S L3

6

FILE 'USPATFULL' ENTERED AT 15:09:24 ON 03 OCT 2002 1 S L3

ANSWER 1 OF 1 USPATFULL L6

ACCESSION NUMBER: 2002:186282 USPATFULL

TITLE: Process and ester derivatives useful for

preparation of cephalosporins

Colberg, Juan C., Norwich, CT, UNITED STATES INVENTOR(S):

Tucker, John L., Niantic, CT, UNITED STATES Zenoni, Maurizio, Milan, ITALY Fogliato, Giovanni, Bergamo, ITALY Donadelli, Alessandro, Lodi, ITALY

PATENT ASSIGNEE(S): Pfizer Inc. (U.S. corporation)

> NUMBER KIND DATE

PATENT INFORMATION: US 2002099205 A1 20020725 APPLICATION INFO.: US 2001-6579 A1 20011204 (10)

NUMBER DATE

PRIORITY INFORMATION: US 2000-251018P 20001204 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PFIZER INC, 150 EAST 42ND STREET, 5TH FLOOR -

STOP 49, NEW YORK, NY, 10017-5612

NUMBER OF CLAIMS: 39 EXEMPLARY CLAIM: 1 LINE COUNT: 1433

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates a process for preparing a compound of

formula (I) ##STR1##

wherein R.sup.1 is para-nitrobenzyl or allyl; and X is halo, which is useful to prepare 3-cyclic-ether-substituted cephalosporins, from trimethylphosphinic compounds. This invention also relates to compounds useful in such process.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

12 13 14

(FILE 'MARPAT' ENTERED AT 15:09:42 ON 03 OCT 2002)

26 G4 { CH2~C==CH2 @23 24 25

CH2~Cb~NO2

@20 21 22

VAR G1=15/17
VAR G2=20/23
REP G3=(1-6) CH2
VAR G4=H/CH3
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 10
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

L1

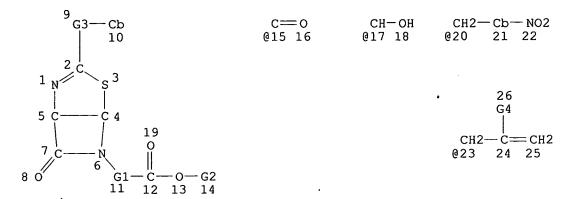
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME:
MLEVEL IS CLASS ON RING NODES AND RING GROUPS
MLEVEL IS CLASS ON CHAIN NODES AND CHAIN GROUPS
ECLEVEL IS LIM ON ALL NODES
ALL RING(S) ARE ISOLATED

L8 83 SEA FILE=MARPAT SSS FUL L1 (MODIFIED ATTRIBUTES)
L9 STR



VAR G1=15/17
VAR G2=20/23
REP G3=(1-6) CH2
VAR G4=H/CH3
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 10
GGCAT IS UNS AT 21
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RSPEC I

NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME:
MLEVEL IS CLASS ON RING NODES AND RING GROUPS
MLEVEL IS CLASS ON CHAIN NODES AND CHAIN GROUPS
ECLEVEL IS LIM ON ALL NODES
ALL RING(S) ARE ISOLATED

I-10

TITLE:

2 SEA FILE=MARPAT SUB=L8 SSS FUL L9 (MODIFIED ATTRIBUTES)

100.0% PROCESSED 83 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.08

L10 ANSWER 1 OF 2 MARPAT COPYRIGHT 2002 ACS

ACCESSION NUMBER: 137:33162 MARPAT

Process for the preparation of p-nitrobenzyl or allyl esters of 3-cyclic-ether substituted

cephalosporins from trimethylphosphinic

compounds via an intramolecular Wittig reaction

INVENTOR(S): Colberg, Juan Carlos; Tucker, John Lloyd;

Zenoni, Maurizio; Fogliato, Giovanni; Donadelli,

Alessandro

PATENT ASSIGNEE(S):

SOURCE:

Pfizer Products Inc., USA

PCT Int. Appl., 47 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PATENT NO.			KI	ND	DATE			APPLICATION NO.					DATE			
WO	2002	0461	99	A.	1	2002	0613		W	O 20	01-II	B218	1	2001	1119	
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		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,
				•			•		•	•		-		MW,		-
		NO,	NZ,	OM,	PH,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,
		TM,	TR,	TT,	TZ,	UA,	ŪG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	ТJ,	MT									
	RW:		•	•	•	•			•					ZW,		
														MC,		
		SE,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,
			TD,													
	2002											3929		2001		
US	2002	0992	05	A.	1	2002	0725		U	S 20	01-6	579		2001	1204	
PRIORIT	Y APP	LN.	INFO	. :					U	S 20	00-2	5101	8 P	2000	1204	
						M(20 C	01-I	B218	1	2001	1119				

OTHER SOURCE(S):

CASREACT 137:33162

GI

A process for the prepn. of I (R1 = p-nitrobenzyl, allyl; X = halo) via an intramol. Wittig reaction of II (R1 = p-nitrobenzyl, allyl; R2 = C1-6-alkyl, C6-10-aryl, C6-10-aryl-C1-6-alkyl, dithianyl) to AΒ prep. 3-cyclic-ether substituted derivs. of cephalosporins is described. Thus, III was treated with p-nitrobenzyl glyoxylate

```
monohydrate followed by redn. of the intermediate with NaBH4. The
resulting hydroxy compd. was treated with p-toluenesulfonic acid
followed by addn. of (S)-1-(tetrahydro-2-furanyl)ethanone, addn. of
thionyl chloride, and finally trimethylphosphine to give the desired
intermediate II (R1 = p-nitrobenzyl, R2 = PhCH2). Cyclization of II
via an intramol. Wittig reaction was accomplished by refluxing for
16 h in THF. Addn. of phosphorus pentachloride and .alpha.-picoline
in dichloromethane gave the free amine of I (R1 = p-nitrobenzyl).
ICM C07D501-08
    C07D501-18; C07D501-20; C07D405-12; C07F009-568; C07D205-095;
ICS
     C07D513-04; C07D513-04; C07D277-00; C07D205-00
26-5 (Biomolecules and Their Synthetic Analogs)
cephalosporin lactam antibiotic cyclic ether substituted prepn;
Wittig reaction intramol cyclic ether cephalosporin prepn
Wittig reaction
   (intramol.; process for the prepn. of p-nitrobenzyl or allyl
   esters of 3-cyclic-ether substituted cephalosporins from
   trimethylphosphinic compds. via an intramol. Wittig reaction)
Lactams
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
(Preparation)
   (.beta.-; process for the prepn. of p-nitrobenzyl or allyl esters
   of 3-cyclic-ether substituted cephalosporins from
   trimethylphosphinic compds. via an intramol. Wittig reaction)
Antibiotics
   (.beta.-lactam; process for the prepn. of p-nitrobenzyl or allyl
   esters of 3-cyclic-ether substituted cephalosporins from
   trimethylphosphinic compds. via an intramol. Wittig reaction)
676-96-0
   (prepn. of)
                               436100-75-3P
                                              436100-76-4P
436100-73-1P
               436100-74-2P
               436100-78-6P
                               436800-38-3P
                                              436800-39-4P
436100-77-5P
436800-40-7P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic
preparation); PREP (Preparation); RACT (Reactant or reagent)
   (process for the prepn. of p-nitrobenzyl or allyl esters of
   3-cyclic-ether substituted cephalosporins from
   trimethylphosphinic compds. via an intramol. Wittig reaction)
436100-68-4P
               436800-42-9P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
(Preparation)
   (process for the prepn. of p-nitrobenzyl or allyl esters of
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   trimethylphosphinic compds. via an intramol. Wittig reaction)
64-17-5, Ethanol, uses
                         67-56-1, Methanol, uses
                                                    67-64-1, Acetone,
       68-12-2, DMF, uses
                            71-23-8, Propanol, uses
                                                       75-09-2,
Methylene chloride, uses
RL: NUU (Other use, unclassified); USES (Uses)
   (process for the prepn. of p-nitrobenzyl or allyl esters of
   3-cyclic-ether substituted cephalosporins from
   trimethylphosphinic compds. via an intramol. Wittig reaction)
                           594-09-2, Trimethylphosphine 619-73-
3-69-0 64370-42-9, Allyl glyoxylate
79-37-8, Oxalyl chloride
                       34103-69-0
4-Nitrobenzylalcohol
                                           436800-46-3
                             192049-49-3
                                                         436801-05-7
131328-27-3
              141194-61-8
436801-06-8
              436801-07-9
                             436801-08-0
RL: RCT (Reactant); RACT (Reactant or reagent)
   (process for the prepn. of p-nitrobenzyl or allyl esters of
   3-cyclic-ether substituted cephalosporins from
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trimethylphosphinic compds. via an intramol. Wittig reaction) 81779-73-9P IT RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (process for the prepn. of p-nitrobenzyl or allyl esters of 3-cyclic-ether substituted cephalosporins from trimethylphosphinic compds. via an intramol. Wittig reaction) IT 108-48-5, 2,6-Lutidine 109-02-4, N-Methylmorpholine Pyridine, reactions 288-32-4, Imidazole, reactions 507-16-4, 7719-09-7, Thionyl chloride 7719-12-2, Thionyl bromide 7789-60-8, Phosphorus tribromide Phosphorus trichloride RL: RGT (Reagent); RACT (Reactant or reagent) (process for the prepn. of p-nitrobenzyl or allyl esters of 3-cyclic-ether substituted cephalosporins from trimethylphosphinic compds. via an intramol. Wittig reaction) REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 2 MARPAT COPYRIGHT 2002 ACS

ACCESSION NUMBER: 122:214087 MARPAT

TITLE: 5-Member heterocyclic antithrombotics and blood

platelet aggregation inhibitors

INVENTOR(S): Linz, Guenter; Himmelsbach, Frank; Austel,

Volkhard; Pieper, Helmut; Mueller, Thomas;

Weisenberger, Johannes; Guth, Brian

PATENT ASSIGNEE(S): Thomae, Dr. Karl, G.m.b.H., Germany

SOURCE: Ger. Offen., 35 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

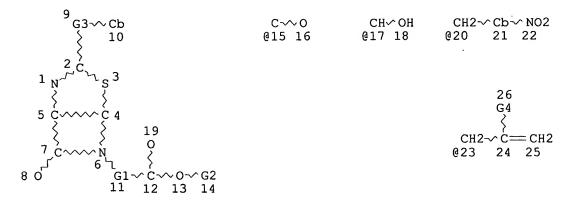
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4302051	A1	19940728	DE 1993-4302051	19930126
CA 2114178	AA	19940727	CA 1994-2114178	19940125
NO 9400261	A	19940727	NO 1994-261	19940125
JP 07002851	A2	19950106	JP 1994-6295	19940125
CN 1097753	A	19950125	CN 1994-100575	19940125
ZA 9400495	A	19950725	ZA 1994-495	19940125
FI 9400378	Α	19940727	FI 1994-378	19940126
EP 608858	A1	19940803	EP 1994-101125	19940126
R: AT, BE,	CH, DE	, DK, ES, FR,	GB, GR, IE, IT, LI	, LU, NL, PT,
SE				
AU 9453984	A1	19940804	AU 1994-53984	19940127
PRIORITY APPLN. INFO	D.:		DE 1993-4302051	19930126

```
AB
     The title compds. [I; X1-X5 = C- \text{ or heteroatom-contg. (heteroatom)}]
     substituents], useful as antithrombotics and blood platelet
     aggregation inhibitors (no data), are prepd. and I-contg.
     formulations presented. Thus, 1-[6-(4-amidinophenyl)-3-pyridazinyl]-
     4-[2-(n-butanesulfonylamino)-2-carboxyethyl]imidazole hydrochloride
     was prepd. and demonstrated an ED50 of 40 nM in a collagen-induced
     blood platelet aggregation assay.
IC
     ICM
         C07D417-10
          C07D401-10; C07D403-10; C07D413-10; C07D453-02; A61K031-41;
     ICS
          A61K031-445; A61K031-495; C07D233-64; C07D277-22; C07D403-06;
          C07D417-12
    C07D417-10, C07D285-12; C07D277-42, C07D211-18; C07D401-10,
ICI
     C07D227-04; C07D247-00, C07D249-08
     28-15 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
     Section cross-reference(s): 1, 63
     amidinophenylpyridazinylbutanesulfonylaminocarboxyethylimidazole
ST
     prepn antithrombotic; platelet aggregation inhibitor prepn
     amidinophenylpyridazinylbutanesulfonylaminocarboxyethylimidazole;
     pyridazine prepn platelet aggregation inhibitor
IT
     Anticoagulants and Antithrombotics
     Blood platelet aggregation inhibitors
        (five-member heterocyclic compds.)
TΤ
     92021-38-0P
                   149353-75-3P
                                   149353-84-4P, 4-(4-Piperidinyl)benzoic
                          161975-19-5P
                                          161975-20-8P
                                                         161975-21-9P
     acid hydrochloride
                                   161975-24-2P
                                                   161975-25-3P
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     161975-22-0P
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                                    161975-28-6P
                                                   161975-29-7P
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                                    161975-32-2P
                                                   161975-33-3P
     161975-30-0P
     161975-34-4P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
        (prepn. and reaction of, in prepn. of heterocyclic
        antithrombotics and blood platelet aggregation inhibitors)
IT
                    161974-51-2P
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                    161974-99-8P
                                    161975-00-4P
                                                   161975-01-5P
     161975-02-6P
                    161975-03-7P
                                    161975-04-8P
                                                   161975-05-9P
                                                   161975-09-3P
     161975-06-0P
                    161975-07-1P
                                    161975-08-2P
                                    161975-12-8P
                                                   161975-13-9P
     161975-10-6P
                    161975-11-7P
     161975-14-0P
                    161975-15-1P
                                    161975-16-2P
                                                   161975-17-3P
     161975-18-4P
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); SPN (Synthetic preparation); BIOL
     (Biological study); PREP (Preparation)
        (prepn. of, as antithrombotic and blood platelet aggregation
        inhibitor)
IT
     62-53-3, Aniline, reactions
                                   124-42-5, Acetamidine hydrochloride
                                                      3196-73-4, Methyl
     2021-28-5, Ethyl 3-phenylpropionate
                                            2488-14-4
```

.beta.-alaninate hydrochloride 5781-53-3, Methyl chlorooxoacetate 17790-81-7, Methyl 4-bromo-3-oxobutanoate 19172-47-5, Lawesson's Reagent 24424-99-5 32245-87-7, 1-Acetyl-4-phenylpiperidine 35444-44-1, Methyl 6-chloro-6-oxohexanoate 36218-60-7 66548-54-7, 3-Chloro-6-(4-cyanophenyl)pyridazine 125700-67-6 147699-19-2 161975-35-5 161975-38-8 161975-39-9 RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, in prepn. of heterocyclic antithrombotics and blood platelet aggregation inhibitors)

FILE 'MARPATPREV' ENTERED AT 15:19:21 ON 03 OCT 2002 L1 STR



VAR G1=15/17
VAR G2=20/23
REP G3=(1-6) CH2
VAR G4=H/CH3
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 10
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 26

· STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME:
MLEVEL IS CLASS ON RING NODES AND RING GROUPS
MLEVEL IS CLASS ON CHAIN NODES AND CHAIN GROUPS
ECLEVEL IS LIM ON ALL NODES
ALL RING(S) ARE ISOLATED

E11 =0=SEA FILE=MARPATPREV SSS FUL L1 (MODIFIED ATTRIBUTES)

100.0% PROCESSED 155 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.12

FILE 'HOME' ENTERED AT 15:19:54 ON 03 OCT 2002

(FILE REGISTRY' ENTERED AT 14:49:30 ON 03 OCT 2002) STR

L4

24 G2 CH~~ OH CH2~Cb~NO2 C~~0 CH-✓ P @29 30 031 32 @33 34 19 20 @18 ∨ C== CH2 021 22 23

9 28 0 0 11 ^ C~ ^Hy 25 26 27 17 0 10 0 ~ C~~ O~ G1 12 13 14 15

VAR G1=18/21 VAR G2=H/CH2 REP G3=(1-6) C VAR G4=29/31/33 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM **GGCAT** IS UNS AΤ 8 **GGCAT** IS UNS AT 19 DEFAULT ECLEVEL IS LIMITED ECOUNT IS E4 C E1 O AT 27

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 33

STEREO ATTRIBUTES: NONE 2 SEA FILE=REGISTRY SSS FUL L4

100.0% PROCESSED 60 ITERATIONS

SEARCH TIME: 00.00.04

---2 S L6

L7

FTLE 'HCAPLUS' ENTERED AT 14:54:45 ON 03 OCT 2002

ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS L7

2002:449689 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 137:33162

Process for the preparation of p-nitrobenzyl or TITLE:

allyl esters of 3-cyclic-ether substituted cephalosporins from trimethylphosphinic

compounds via an intramolecular Wittig reaction

2 ANSWERS

Colberg, Juan Carlos; Tucker, John Lloyd; INVENTOR(S):

Zenoni, Maurizio; Fogliato, Giovanni; Donadelli,

Alessandro

Pfizer Products Inc., USA PATENT ASSIGNEE(S): PCT Int. Appl., 47 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	NO.		KI	ND	DATE				PPLI			ο.	DATE		
WO 2002	 04619	9	A:	1	2002	0613						1	2001	1119	
W:	AE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,
	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC;	EE,	ES,	FI,	GB,	GD,
	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,
	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,
	NO,	ΝZ,	OM,	PH,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,
	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,
	KG,	ΚZ,	MD,	RU,	ТJ,	TM									
RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	ΤZ,	ŪG,	ZM,	ZW,	ΑT,	ΒE,
	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,
	SE,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,
	SN,	TD,	TG												
AU 2002	02392	9	A!	5 .	2002	0618		A	U 20	02-2	3929		2001	1119	
US 2002	09920)5	A.	1 .	2002	0725		U	S 20	01-6	579		2001	1204	
PRIORITY APP	LN. I	NFO.	. :				i	US 2	000-	2510	18P	Р	2000	1204	
							1	WO 2	001-	IB21	81	W	2001	1119	
OTHER SOURCE	(S):			CAS	REAC'	г 13	7:33	162;	MAR	PAT	137:	3316	2		

$$R^2$$
 NH S PMe_3 CO_2R^1 I

AB A process for the prepn. of I (R1 = p-nitrobenzyl, allyl; X = halo) via an intramol. Wittig reaction of II (R1 = p-nitrobenzyl, allyl; R2 = C1-6-alkyl, C6-10-aryl, C6-10-aryl-C1-6-alkyl, dithianyl) to prep. 3-cyclic-ether substituted derivs. of cephalosporins is described. Thus, III was treated with p-nitrobenzyl glyoxylate monohydrate followed by redn. of the intermediate with NaBH4. The resulting hydroxy compd. was treated with p-toluenesulfonic acid

followed by addn. of (S)-1-(tetrahydro-2-furanyl)ethanone, addn. of thionyl chloride, and finally trimethylphosphine to give the desired intermediate II (R1 = p-nitrobenzyl, R2 = PhCH2). Cyclization of II via an intramol. Wittig reaction was accomplished by refluxing for 16 h in THF. Addn. of phosphorus pentachloride and .alpha.-picoline in dichloromethane gave the free amine of I (R1 = p-nitrobenzyl).

IT 436100-74-2P 436100-77-5P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(process for the preparation) of p-nitrobenzyl or allyl esters of

(process for the prepn. of p-nitrobenzyl or allyl esters of 3-cyclic-ether substituted cephalosporins from

trimethylphosphinic compds. via an intramol. Wittig reaction)

RN 436100-74-2 HCAPLUS

CN 1-Azetidineacetic acid, .alpha.-hydroxy-2-oxo-4-[[2-oxo-2-[(2S)-tetrahydro-2-furanyl]ethyl]thio]-3-[(phenylacetyl)amino]-, (4-nitrophenyl)methyl ester, (3R,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 436100-77-5 HCAPLUS

CN 1-Azetidineacetic acid, .alpha.-hydroxy-2-oxo-4-[[2-oxo-2-[(2S)-tetrahydro-2-furanyl]ethyl]thio]-3-[(phenylacetyl)amino]-, 2-propenyl ester, (3R,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS

2002:449688 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 137:33161

Coupling process and intermediates useful for TITLE:

preparing cephalosphorins

Colberg, Juan Carlos; Donadelli, Alessandro; INVENTOR(S):

Fogliato, Giovanni; Zenoni, Maurizio

Pfizer Products Inc., USA PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
KIND DATE
      PATENT NO.
                                                         APPLICATION NO. DATE
      WO 2002046198 A1 20020613 WO 2001-IB2225 20011122
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
                 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
                 NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY,
                 KG, KZ, MD, RU, TJ, TM
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
                 SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
                 SN, TD, TG
      AU 2002023943
                            A5
                                     20020618
                                                         AU 2002-23943
                                                                                20011122
                                                      US 2000-251014P P 20001204
PRIORITY APPLN. INFO.:
                                                     WO 2001-IB2225 W 20011122
                               MARPAT 137:33161
OTHER SOURCE(S):
```

GI

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB This invention relates to a novel process for the prepn. of 3-cyclic-ether-substituted cephalosporins, such as I [CO2R1 =carboxylic acid or a carboxylate salt; A1 = aryl, heteroaryl, heterocyclyl; A2 = H, alkyl, cycloalkyl, aryl, etc.], via amidation reactions. Thus, cephalosporin II was prepd. in 80% yield by amidation of amine III with the acid anhydride of acid IV using O,O-di-Et hydrogenphosphorothioate in a Me2CO/H2O soln.
- 436100-74-2P 436100-77-5P ΙT RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (process for the prepn. of intermediates via amidation which are useful for prepg. cephalosphorins)

RN 436100-74-2 HCAPLUS.

1-Azetidineacetic acid, .alpha.-hydroxy-2-oxo-4-[[2-oxo-2-[(2S)-CN tetrahydro-2-furanyl]ethyl]thio]-3-[(phenylacetyl)amino]-, (4-nitrophenyl)methyl ester, (3R,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

436100-77-5 HCAPLUS RN

1-Azetidineacetic acid, .alpha.-hydroxy-2-oxo-4-[[2-oxo-2-[(2S)-CN tetrahydro-2-furanyl]ethyl]thio]-3-[(phenylacetyl)amino]-, 2-propenyl ester, (3R, 4R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ELLE CAOLD" ENTERED AT 14:55:19 ON 03 OCT 2002 0 S L6

6

'USPATFULL' ENTERED AT 14:55:36 ON 03 OCT 2002 L9 1 S L6

ANSWER 1 OF 1 USPATFULL L9

ACCESSION NUMBER:

2002:186282 USPATFULL

TITLE:

L8

Process and ester derivatives useful for

preparation of cephalosporins

INVENTOR(S):

Colberg, Juan C., Norwich, CT, UNITED STATES

Tucker, John L., Niantic, CT, UNITED STATES Zenoni, Maurizio, Milan, ITALY Fogliato, Giovanni, Bergamo, ITALY Donadelli, Alessandro, Lodi, ITALY

PATENT ASSIGNEE(S):

Pfizer Inc. (U.S. corporation)

NUMBER KIND DATE 20020725 PATENT INFORMATION: US 2002099205 A1

APPLICATION INFO.: US 2001-6579 A1 20011204 (10)

NUMBER DATE

PRIORITY INFORMATION: US 2000-251018P 20001204 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: PFIZER INC, 150 EAST 42ND STREET, 5TH FLOOR -

STOP 49, NEW YORK, NY, 10017-5612

NUMBER OF CLAIMS: 39
EXEMPLARY CLAIM: 1
LINE COUNT: 1433

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

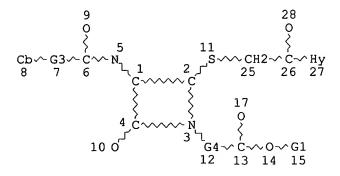
AB This invention relates a process for preparing a compound of

formula (I) ##STR1##

wherein R.sup.1 is para-nitrobenzyl or allyl; and X is halo, which is useful to prepare 3-cyclic-ether-substituted cephalosporins, from trimethylphosphinic compounds. This invention also relates to compounds useful in such process.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

(FTLE="MARPAT" ENTERED AT 14:55:53 ON 03 OCT 2002)
L4 STR



VAR G1=18/21 VAR G2=H/CH2 REP G3=(1-6) C VAR G4=29/31/33NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM GGCAT IS UNS AT8 IS UNS AT 19 **GGCAT** DEFAULT ECLEVEL IS LIMITED ECOUNT IS E4 C E1 O AT 27

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 33

STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME: MLEVEL IS CLASS ON RING NODES AND RING GROUPS MLEVEL IS CLASS ON CHAIN NODES AND CHAIN GROUPS ECLEVEL IS LIM ON ALL NODES ALL RING(S) ARE ISOLATED

15 SEA FILE=MARPAT SSS FUL L4 (MODIFIED ATTRIBUTES)

15 ANSWERS 21843 ITERATIONS (13 INCOMPLETE) 100.0% PROCESSED SEARCH TIME: 00.02.22

L11 ANSWER 1 OF 15 MARPAT COPYRIGHT 2002 ACS

(ALL HITS ARE ITERATION INCOMPLETES)

ACCESSION NUMBER: 137:119655 MARPAT

Combinations of drugs (e.g., a benzimidazole and TITLE:

pentamidine) for the treatment of neoplastic

disorders

Borisy, Alexis; Keith, Curtis; Foley, Michael INVENTOR(S):

A.; Stockwell, Brent R.

PATENT ASSIGNEE(S): Combinatorx Incorporated, USA

PCT Int. Appl., 57 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE		APPLICATI	ON NO.	DATE		
WO 2002058697	A1 2002	0801	WO 2002-U	S1707	20020122		
	AL, AM, AT,						
	CR, CU, CZ,						
	GM, HR, HU, LR, LS, LT,						
	OM, PH, PL,						
	TR, TT, TZ,			YU, ZA,	ZM, ZW,	AM,	
·	KG, KZ, MD,			IIC EM	75.1 70.00	שמ	
	KE, LS, MW, DE, DK, ES,						
	BF, BJ, CF,						
SN, TD,		, ,		-, ,			
PRIORITY APPLN. INFO			US 2001-7				
AB The invention f	eatures a me	thod for	treating a	patient .	having a		
cancer or other benzimidazole o							
pentamidine or							
within 14 days							
growth of the n	•						
IC ICM A61K031-41							
CC 1-6 (Pharmacolo Section cross-r		63					

antitumor agent benzimidazole pentamidine analog combination ST

IT Uterus, neoplasm

(cervix; drug combinations for treatment of neoplastic disorders)

```
Intestine, neoplasm
IT
        (colon; drug combinations for treatment of neoplastic disorders)
TT
     Intestine, neoplasm
        (colorectal; drug combinations for treatment of neoplastic
        disorders)
     Antitumor agents
IT
     Brain, neoplasm
     Kidney, neoplasm
     Leukemia
     Liver, neoplasm
     Lung, neoplasm
     Lymphoma
     Ovary, neoplasm
     Pancreas, neoplasm
     Sarcoma
     Skin, neoplasm
     Stomach, neoplasm
     Testis, neoplasm
     Uterus, neoplasm
        (drug combinations for treatment of neoplastic disorders)
     Drug delivery systems
TT
        (inhalants; drug combinations for treatment of neoplastic
        disorders)
ΙT
     Drug delivery systems
        (injections, i.m.; drug combinations for treatment of neoplastic
        disorders)
IT
     Drug delivery systems
        (injections, i.v.; drug combinations for treatment of neoplastic
        disorders)
IT
     Mammary gland
     Prostate gland
        (neoplasm; drug combinations for treatment of neoplastic
        disorders)
IT
     Drug delivery systems
        (oral; drug combinations for treatment of neoplastic disorders)
IT
     Drug delivery systems
        (rectal; drug combinations for treatment of neoplastic disorders)
     60-56-0, Mercazole
                          100-33-4, Pentamidine 101-62-2, Phenamidine
IT
                                                       140-64-7,
     104-32-5, Propamidine
                             122-06-5, Stilbamidine
                               495-99-8, Hydroxystilbamidine
     Pentamidine isethionate
                         536-71-0, Diminazene
                                                 548-73-2, Droperidol
     Dibrompropamidine
                             1402-38-6, Actinomycin
     618-39-3, Benzamidine
                                                       1438-30-8,
                 1929-88-0, Benzthiazuron
                                             2062-78-4, Pimozide
     Netropsin
     3459-96-9, Amicarbalide
                               6306-71-4, Lobendazole
                                                         11056-06-7,
                                             17804-35-2, Benomyl
     Bleomycin
                14255-87-9, Parbendazole
     Bleomycin 14255-87-9, Parbend 18691-97-9, Methabenzthiazuron
                                       20559-55-1, Oxibendazole
                                22769-68-2
                                              24370-25-0,
     20830-81-3, Daunorubicin
                           26097-80-3, Cambendazole
                                                       26130-02-9,
     2-Benzimidazolylurea
                  31430-15-6, Flubendazole
                                              31430-18-9, Nocodazole
     Frentizole
                               31431-43-3, Cyclobendazole
     31431-39-7, Mebendazole
                                                             33016-12-5,
                                       43210-67-9, Fenbendazole
             39389-47-4, Distamycin
     TN-16
     53716-50-0, Oxfendazole
                               54029-12-8, Albendazole sulfoxide
     54965-21-8, Albendazole
                                                          61570-90-9,
                               57808-66-9, Domperidone
                   68844-77-9, Astemizole
                                             73590-58-6, Omeprazole
     Tioxidazole
                                        80434-77-1, NSC 181928
     75184-71-3, Albendazole sulfone
                                                            116644-53-2,
     90509-02-7, Luxabendazole
                                  94345-47-8, Heptamidine
                                             124076-65-9
                                                           161374-52-3,
     Mibefradil
                  124076-61-5, Butamidine
     Nonamidine
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RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(drug combinations for treatment of neoplastic disorders)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN

THE RE FORMAT

L11 ANSWER 2 OF 15 MARPAT COPYRIGHT 2002 ACS

ACCESSION NUMBER: 137:33162 MARPAT

TITLE: Process for the preparation of p-nitrobenzyl or

allyl esters of 3-cyclic-ether substituted

cephalosporins from trimethylphosphinic

compounds via an intramolecular Wittig reaction

INVENTOR(S): Colberg, Juan Carlos; Tucker, John Lloyd;

Zenoni, Maurizio; Fogliato, Giovanni; Donadelli,

Alessandro

PATENT ASSIGNEE(S): Pfizer Products Inc., USA

SOURCE: PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE: Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	ENT 1	10.		KI	ND :	DATE			A:	PPLI	CATI	ои ис	o.	DATE		
WO 2002046199				A1 20020613					WO 2001-IB2181					20011119		
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,
														FI,		
														KP,		
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,
		NO,	NZ,	OM,	PH,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,
		TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	ТJ,	TM									
	RW:	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,
		CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,
		SE,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
		SN,	TD,	TG												
AU 2	20020	02392	29	A.	5 .	2002	0618		Αl	U 20	02-2	3929		2001	1119	
US 2	20020	9920	05	A	1 .	2002	0725		U	S 20	01-6	579		2001	1204	
PRIORITY	APPI	LN. :	INFO	.:					U	S 20	00-2	5101	ΒP	2000	1204	
									W	0 20	01-1	B218	1	2001	1119	
OTHER SOL	IDCE	101 .			CAS	מהשכי	ጥ 13	7 - 22	162							

OTHER SOURCE(S):

CASREACT 137:33162

GI

AB A process for the prepn. of I (R1 = p-nitrobenzyl, allyl; X = halo) via an intramol. Wittig reaction of II (R1 = p-nitrobenzyl, allyl; R2 = C1-6-alkyl, C6-10-aryl, C6-10-aryl-C1-6-alkyl, dithianyl) to prep. 3-cyclic-ether substituted derivs. of cephalosporins is described. Thus, III was treated with p-nitrobenzyl glyoxylate monohydrate followed by redn. of the intermediate with NaBH4. The resulting hydroxy compd. was treated with p-toluenesulfonic acid followed by addn. of (S)-1-(tetrahydro-2-furanyl)ethanone, addn. of thionyl chloride, and finally trimethylphosphine to give the desired intermediate II (R1 = p-nitrobenzyl, R2 = PhCH2). Cyclization of II via an intramol. Wittig reaction was accomplished by refluxing for 16 h in THF. Addn. of phosphorus pentachloride and .alpha.-picoline in dichloromethane gave the free amine of I (R1 = p-nitrobenzyl).

CC 26-5 (Biomolecules and Their Synthetic Analogs)

ST cephalosporin lactam antibiotic cyclic ether substituted prepn; Wittig reaction intramol cyclic ether cephalosporin prepn IT Wittig reaction

(intramol.; process for the prepn. of p-nitrobenzyl or allyl esters of 3-cyclic-ether substituted cephalosporins from trimethylphosphinic compds. via an intramol. Wittig reaction)

IT Lactams

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(.beta.-; process for the prepn. of p-nitrobenzyl or allyl esters of 3-cyclic-ether substituted cephalosporins from

trimethylphosphinic compds. via an intramol. Wittig reaction)

IT Antibiotics

(.beta.-lactam; process for the prepn. of p-nitrobenzyl or allyl esters of 3-cyclic-ether substituted cephalosporins from trimethylphosphinic compds. via an intramol. Wittig reaction)

IT 676-96-0

(prepn. of)

IT 436100-73-1P 436100-74-2P 436100-75-3P 436100-76-4P

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436100-78-6P
                                    436800-38-3P
                                                   436800-39-4P
     436100-77-5P
     436800-40-7P
     RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic
     preparation); PREP (Preparation); RACT (Reactant or reagent)
        (process for the prepn. of p-nitrobenzyl or allyl esters of
        3-cyclic-ether substituted cephalosporins from
        trimethylphosphinic compds. via an intramol. Wittig reaction)
                    436800-42-9P
IT
     436100-68-4P
     RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
     (Preparation)
        (process for the prepn. of p-nitrobenzyl or allyl esters of
        3-cyclic-ether substituted cephalosporins from
        trimethylphosphinic compds. via an intramol. Wittig reaction)
                              67-56-1, Methanol, uses 67-64-1, Acetone,
     64-17-5, Ethanol, uses
IΤ
            68-12-2, DMF, uses
                                 71-23-8, Propanol, uses
                                                            75-09-2,
     Methylene chloride, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (process for the prepn. of p-nitrobenzyl or allyl esters of
        3-cyclic-ether substituted cephalosporins from
        trimethylphosphinic compds. via an intramol. Wittig reaction)
                                594-09-2, Trimethylphosphine
     79-37-8, Oxalyl chloride
                                                                619 - 73 - 8,
TΤ
                           34103-69-0 64370-42-9, Allyl glyoxylate
     4-Nitrobenzylalcohol
     131328-27-3
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                                                436800-46-3
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                   141194-61-8
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                   436801-07-9
                                  436801-08-0
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (process for the prepn. of p-nitrobenzyl or allyl esters of
        3-cyclic-ether substituted cephalosporins from
        trimethylphosphinic compds. via an intramol. Wittig reaction)
     81779-73-9P
IT
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
        (process for the prepn. of p-nitrobenzyl or allyl esters of
        3-cyclic-ether substituted cephalosporins from
        trimethylphosphinic compds. via an intramol. Wittig reaction)
IT
     108-48-5, 2,6-Lutidine
                              109-02-4, N-Methylmorpholine
                                                              110-86-1,
     Pyridine, reactions
                           288-32-4, Imidazole, reactions
                                                             507-16-4.
     Thionyl bromide
                       7719-09-7, Thionyl chloride
                                                      7719-12-2,
                              7789-60-8, Phosphorus tribromide
     Phosphorus trichloride
     RL: RGT (Reagent); RACT (Reactant or reagent)
        (process for the prepn. of p-nitrobenzyl or allyl esters of
        3-cyclic-ether substituted cephalosporins from
        trimethylphosphinic compds. via an intramol. Wittig reaction)
                               THERE ARE 6 CITED REFERENCES AVAILABLE FOR
REFERENCE COUNT:
                         6
                                THIS RECORD. ALL CITATIONS AVAILABLE IN
                               THE RE FORMAT
L11 ANSWER 3 OF 15 MARPAT COPYRIGHT 2002 ACS
(ALL HITS ARE ITERATION INCOMPLETES)
ACCESSION NUMBER:
                         134:295744 MARPAT
                         Substituted 2-thio-3,5-dicyano-4-aryl-6-
TITLE:
                         aminopyridines and the use thereof as adenosine
                         receptor ligands
                         Rosentreter, Ulrich; Henning, Rolf; Bauser,
INVENTOR(S):
                         Marcus; Kraemer, Thomas; Vaupel, Andrea; Huebsch, Walter: Dembowsky, Klaus;
                         Salcher-Schraufstaetter, Olga; Stasch,
                         Johannes-Peter; Krahn, Thomas; Perzborn,
                         Elisabeth
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PATENT ASSIGNEE(S):

Bayer A.-G., Germany PCT Int. Appl., 316 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	NO.	KIND	DATE		APPLICATION NO. DATE	DATE		
	1025210 1025210				WO 2000-EP9153 20000919			
	AE, AG, CN, CR, GM, HR, LR, LS, PL, PT,	AL, AM, CU, CZ, HU, ID, LT, LU, RO, RU,	AT, AU, DE, DK, IL, IN, LV, MA, SD, SE,	DM, IS, MD, SG,	, BA, BB, BG, BR, BY, BZ, CA, CH, DZ, EE, ES, FI, GB, GD, GE, GH, JP, KE, KG, KP, KR, KZ, LC, LH, MG, MK, MN, MW, MX, MZ, NO, NZ, SI, SK, SL, TJ, TM, TR, TT, TZ, ZW, AM, AZ, BY, KG, KZ, MD, RU	H, K, Z, Z,		
DE 199 BR 200	TJ, TM: GH, GM, CY, DE, BF, BJ, 47154 0014679	KE, LS, DK, ES, CF, CG, A1 A	MW, MZ, FI, FR, CI, CM, 20011004 20020702	SD, GB, GA,	, SL, SZ, TZ, UG, ZW, AT, BE, CF, GR, IE, IT, LU, MC, NL, PT, SE, GN, GW, ML, MR, NE, SN, TD, TG DE 1999-19947154 19991001 BR 2000-14679 20000919	Η, Ε,		
R:	AT, BE, PT, IE, 2001449	CH, DE, SI, LT, A	DK, ES, LV, FI, 20020507	FR, RO,	EP 2000-967705 20000919 , GB, GR, IT, LI, LU, NL, SE, MC , MK, CY, AL NO 2002-1449 20020322 DE 1999-19947154 19991001 WO 2000-EP9153 20000919	Ξ,		

The invention relates to compds. I, a method for their prodn., and AΒ their use as pharmacol. effective substances for a broad spectrum of medical indications [wherein: R1, R2, R3 = H, OH, (un)substituted alkyl, aryl, alkoxy, O(CH2)0-2CH:CH2, halo, NO2, cyano, COR5, CONR6R7, NR6R7, etc.; R4 = (un)substituted alkyl or alkenyl, or 5-to 7-membered (un)satd. NOS heterocyclyl; R5 = H, OH, (un) substituted alkyl, cycloalkyl, alkoxy, aryl, aryloxy, aralkoxy,

> 308-4994 Searcher : Shears

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5- to 7-membered (un)satd. heterocyclyl, or 5- to 6-membered NOS
heteroaryl; R6, R7 = H, (un) substituted alkyl, aryl, or 5- to
6-membered NOS heteroaryl; or NR6R7 = 5- to 7-membered (un)satd. NOS
heterocyclyl; including tautomers, salts, hydrates, and alcoholates;
with many specific exclusions]. In particular, selective adenosine
receptor ligands are provided, preferably selective adenosine Al,
adenosine A2a, and/or adenosine A2b receptor ligands. The compds.
are useful for the prophylaxis and/or the treatment of diseases,
esp. cardiovascular diseases, diseases of the urogenital region,
diseases of the respiratory tract, inflammatory and
neuroinflammatory diseases, diabetes, esp. pancreatic diabetes,
neurodegenerative diseases, pain states, and cancer, as well as
liver fibrosis and cirrhosis. Over 400 compds. were synthesized on
a preparative scale, and 375 addnl. compds. were prepd. on a
10-.mu.mol scale. For instance, title compd. II was prepd. in 66.3%
yield by thioetherification of the corresponding pyridinethiol with
MeNHCOCH2Br using NaHCO3 in DMF at room temp. II had a marked
agonist activity on cells expressing human adenosine A2b receptors,
and nearly no activity against cells expressing A2a receptors.
Compds. I also selectively reduced coronary perfusion pressure in
narcotized rats at concns. of 10-7 to 10-6 g/mL.
ICM C07D213-85
    A61K031-4418; A61K031-4427; C07D401-12; C07D405-12; C07D409-12;
ICS
     C07D413-12; C07D417-12
27-16 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1
thiodicyanoarylaminopyridine prepn adenosine receptor agonist
cardiovascular agent; pyridine thiodicyanoarylamino prepn coronary
vasodilator antihypertensive
Purinoceptor agonists
   (A1; prepn. of substituted thiodicyanoarylaminopyridines as
   adenosine receptor agonists)
Adenosine receptors
RL: BPR (Biological process); BSU (Biological study, unclassified);
MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
   (A1; prepn. of substituted thiodicyanoarylaminopyridines as
   adenosine receptor agonists)
Purinoceptor agonists
   (A2b; prepn. of substituted thiodicyanoarylaminopyridines as
   adenosine receptor agonists)
Adenosine receptors
RL: BPR (Biological process); BSU (Biological study, unclassified);
MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
   (A2b; prepn. of substituted thiodicyanoarylaminopyridines as
   adenosine receptor agonists)
Adenosine receptors
RL: BPR (Biological process); BSU (Biological study, unclassified);
MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
   (A2a; prepn. of substituted thiodicyanoarylaminopyridines as
   adenosine receptor agonists)
Vasodilators
   (coronary; prepn. of substituted thiodicyanoarylaminopyridines as
   adenosine receptor agonists)
Nervous system
   (degeneration, treatment; prepn. of substituted
   thiodicyanoarylaminopyridines as adenosine receptor agonists)
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Respiratory tract

Searcher: Shears 308-4994

(disease, treatment; prepn. of substituted

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thiodicyanoarylaminopyridines as adenosine receptor agonists)
IT
     Urogenital tract
        (diseases, treatment; prepn. of substituted
        thiodicyanoarylaminopyridines as adenosine receptor agonists)
IT
     Liver, disease
        (fibrosis, treatment; prepn. of substituted
        thiodicyanoarylaminopyridines as adenosine receptor agonists)
IT
     Analgesics
     Anti-inflammatory agents
     Antidiabetic agents
     Antihypertensives
     Antitumor agents
     Cardiovascular agents
        (prepn. of substituted thiodicyanoarylaminopyridines as adenosine
        receptor agonists)
IT
     Adenosine receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified);
     MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
        (prepn. of substituted thiodicyanoarylaminopyridines as adenosine
        receptor agonists)
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     Cirrhosis
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RL: BAC (Biological activity or effector, except adverse); BSU
(Biological study, unclassified); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (drug candidate; prepn. of substituted
   thiodicyanoarylaminopyridines as adenosine receptor agonists)
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RL: BAC (Biological activity or effector, except adverse); BSU
(Biological study, unclassified); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (drug candidate; prepn. of substituted
   thiodicyanoarylaminopyridines as adenosine receptor agonists)
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333964-95-7P

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(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
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     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (drug candidate; prepn. of substituted
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                                                        109-90-0, Ethyl
     Thiophenol, reactions
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        (starting material; prepn. of substituted
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IT
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     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
        (starting material; prepn. of substituted
        thiodicyanoarylaminopyridines as adenosine receptor agonists)
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L11 ANSWER 4 OF 15 MARPAT COPYRIGHT 2002 ACS
(ALL HITS ARE ITERATION INCOMPLETES)
                         134:173028 MARPAT
ACCESSION NUMBER:
                         Cyclic amine CCR3 antagonists
TITLE:
                         Shiota, Tatsuki; Sudoh, Masaki; Yokoyama,
INVENTOR(S):
                         Tomonori; Muroga, Yumiko; Kamimura, Takashi;
                         Nakanishi, Akinobu
PATENT ASSIGNEE(S):
                         Teijin Ltd., Japan
                         PCT Int. Appl., 263 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                   KIND DATE
                                         APPLICATION NO.
                                                           DATE
     PATENT NO.
                                          _____
                           _____
                     A1
                                        WO 2000-JP5260 20000804
     WO 2001010439
                            20010215
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            TJ, TM
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             SI, LT, LV, FI, RO, MK, CY, AL
                                           JP 1999-220864
PRIORITY APPLN. INFO.:
                                                            19990804
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     Drugs contg. as the active ingredient cyclic amine derivs.
AB
     represented by general formula (Markush's structure given),
     pharmaceutically acceptable acid addn. salts thereof or
     pharmaceutically acceptable C1-6 alkyl adducts thereof.
                                                              These drugs
     are efficacious in preventing and treating diseases in which CCR3
    .participates such as asthma and allergic rhinitis.
     ICM A61K031-40
IC
         A61K031-4025; A61K031-445; A61K031-4468; A61K031-4525;
         A61K031-4535; A61K031-454; A61K031-422; A61K031-404;
         A61K031-4155; A61K031-4245; A61K031-5377; A61K031-4545;
         A61K031-4709; A61K031-4184; A61K031-427; A61K031-506;
         A61K031-433; A61K031-423; A61K031-4192
CC
     1-7 (Pharmacology)
     Section cross-reference(s): 27
     cyclic amine CCR3 antagonist eotaxin antiasthmatic; antiallergic
ST
     cyclic amine CCR3 antagonist eotaxin; dermatitis cyclic amine CCR3
     antagonist eotaxin; inflammatory bowel disease cyclic amine CCR3
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     Eye, disease
IT
        (allergic conjunctivitis; cyclic amine CCR3 antagonists as
        antiasthmatics and allergy inhibitors)
ΙT
        (allergic rhinitis; cyclic amine CCR3 antagonists as
        antiasthmatics and allergy inhibitors)
IT
     Dermatitis
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(atopic; cyclic amine CCR3 antagonists as antiasthmatics and
        allergy inhibitors)
ΙT
     Dermatitis
        (contact; cyclic amine CCR3 antagonists as antiasthmatics and
        allergy inhibitors)
ΙT
     AIDS (disease)
     Allergy inhibitors
     Antiasthmatics
     Urticaria
        (cyclic amine CCR3 antagonists as antiasthmatics and allergy
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IT
     Eotaxin
     RL: BAC (Biological activity or effector, except adverse); BPR
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     (Biological study); PROC (Process)
        (cyclic amine CCR3 antagonists as antiasthmatics and allergy
        inhibitors)
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     Amines, biological studies
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (cyclic; cyclic amine CCR3 antagonists as antiasthmatics and
        allergy inhibitors)
IT
     Intestine, disease
        (inflammatory; cyclic amine CCR3 antagonists as antiasthmatics
        and allergy inhibitors)
ΙT
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     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (cyclic amine CCR3 antagonists as antiasthmatics and allergy
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IT
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     (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (cyclic amine CCR3 antagonists as antiasthmatics and allergy
        inhibitors)
     104-83-6, 4-Chlorobenzyl chloride
                                          121-44-8, Triethylamine,
IT
                  698-80-6, 3,4-Difluorobenzyl chloride
                                                           99724-19-3,
     reactions
     3-{(tert-Butoxycarbonyl)amino}pyrrolidine
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (cyclic amine CCR3 antagonists as antiasthmatics and allergy
        inhibitors)
IT
     169452-11-3P
                     226248-98-2P
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     226249-02-1P
                     226249-94-1P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
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(cyclic amine CCR3 antagonists as antiasthmatics and allergy inhibitors)

REFERENCE COUNT:

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L11 ANSWER 5 OF 15 MARPAT COPYRIGHT 2002 ACS

(ALL HITS ARE ITERATION INCOMPLETES)

ACCESSION NUMBER:

134:17402 MARPAT

TITLE:

Preparation of 4-arylpiperidine derivatives for

the treatment of pruritus

INVENTOR(S):

Armer, Richard Edward; Bronk, Brian Scott;

Gibson, Stephen Paul; Roberts, Lee Richard; Tommasini, Ivan; Verrier, Kimberley

PATENT ASSIGNEE(S):

Pfizer Inc., USA; Pfizer Limited

SOURCE:

Eur. Pat. Appl., 39 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
EP 1055668	A1 20001129	EP 2000-304227	20000518
R: AT, BE,	CH, DE, DK, ES,	FR, GB, GR, IT, LI, LU,	NL, SE, MC,
	SI, LT, LV, FI,		
US 6441000	B1 20020827	US 2000-573300	20000518
JP 2001097972	A2 20010410	JP 2000-154475	20000525
CA 2309505	AA 20001128	CA 2000-2309505	20000526
BR 2000002518	A 20010102	BR 2000-2518	20000529
PRIORITY APPLN. INFO) .:	GB 1999-12413	19990528
GI			

AB The title compds. I [HET = 5-, 6- or 7-membered heterocyclic ring contg. at least one nitrogen atom, and optionally one or more heteroatoms selected from oxygen or sulfur; T = H, halo, OH, :O, C1-6 alkyl, C1-6 alkoxy, etc.; R1, R2 = H, alkyl; R3 = aryl alkyl, alkenyl, alkynyl; X = halo, alkyl, alkoxy], useful in the prophylaxis and in the treatment of diseases mediated by opiate receptors, such as pruritus, were prepd. E.g., a soln. of trans-4-(1-hexyl-3,4-dimethyl-4-piperidinyl)-1,2-benzenediamine (prepn. given) in 90% formic acid was heated to 100 .degree.C for 2

```
h to give trans-5-(1-hexyl-3,4-dimethyl-4-piperidinyl)-1H-
     benzimidazole. The opioid receptor binding assays of I for the
     p-receptor were detd.
IC
     ICM C07D211-26
         CO7D401-04; CO7D413-04; A61K031-454; A61P017-04
     ICS
     27-16 (Heterocyclic Compounds (One Hetero Atom))
CC
     Section cross-reference(s): 1
     arylpiperidine prepn pruritus treatment; piperidine aryl prepn
ST
     pruritus treatment; opioid receptor binding arylpiperidine
     Opioid receptors
TT
     RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL
     (Biological study)
        (prepn. and opioid receptor binding of arylpiperidine derivs.)
ΙT
     Pruritus
        (prepn. of arylpiperidine derivs. for the treatment of pruritus)
                    309263-88-5P
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     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (prepn. of arylpiperidine derivs. for the treatment of pruritus)
                                   79-09-4, Propionic acid, reactions
IT
     79-03-8, Propionyl chloride
     79-31-2, Isobutyric acid
                               103-82-2, Phenylacetic acid, reactions
     104-09-6, p-Tolylacetaldehyde 110-62-3, Valeraldehyde
                                                                589-10-6,
     .beta.-Bromophenetole
                            637-59-2, 1-Bromo-3-phenylpropane
     1850-14-2, Tetramethoxymethane
                                     1886-59-5
                                                  2120-70-9,
     2-Phenoxyacetaldehyde
                            3400-45-1, Cyclopentanecarboxylic acid
     3721-95-7, Cyclobutanecarboxylic acid
                                            16799-08-9
                                                         22409-86-5,
                         35354-37-1, 1-Bromo-5-methylhexane
                                                               42149-74-6.
     3-Phenoxypropanal
     2-Chloroethyl propyl ether
                                  59381-63-4
                                               60656-87-3,
     Benzyloxyacetaldehyde
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (prepn. of arylpiperidine derivs. for the treatment of pruritus)
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ΙT
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     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
        (prepn. of arylpiperidine derivs. for the treatment of pruritus)
                               THERE ARE 7 CITED REFERENCES AVAILABLE FOR
REFERENCE COUNT:
                               THIS RECORD. ALL CITATIONS AVAILABLE IN
                               THE RE FORMAT
L11 ANSWER 6 OF 15 MARPAT COPYRIGHT 2002 ACS
(ALL HITS ARE ITERATION INCOMPLETES)
ACCESSION NUMBER:
                         134:5154 MARPAT
                         Preparation of cyclic amine derivatives as
TITLE:
```

remedies or preventives for diseases in association with chemokines or chemokine

receptors

INVENTOR(S): Shiota, Tatsuki; Miyagi, Fuminori; Kamimura,

Takashi; Ohta, Tomohiro; Takano, Yasuhiro;

Horiuchi, Hideki

PATENT ASSIGNEE(S): Teijin Limited, Japan SOURCE: PCT Int. Appl., 405 pp.

CODEN: PIXXD2

DOCUMENT TYPE:
LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE PATENT NO. APPLICATION NO. DATE ----------WO 2000-JP3203 20000518 A1 20001123 WO 2000069432 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG EP 2000-927808 20000518 EP 1179341 A1 20020213 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE, SI, LT, LV, FI, RO NO 2001-5599 NO 2001005599 20011116 20011116 Α PRIORITY APPLN. INFO.: JP 1999-175856 19990518 JP 1999-251464 19990906 WO 2000-JP3203 20000518

$$\stackrel{R^1}{\searrow} - (CH_2)_{p1} - N \stackrel{(CH_2)_{m1}}{\searrow} - (CH_2)_{n} \stackrel{NCO(CH_2)_{p}}{\underset{R^3}{\sim}} - \stackrel{R^4}{\underset{R^5}{\sim}}$$

Remedies or preventives for diseases in assocn. with chemokines such as MIP-1.alpha. and/or MCP-1 or chemokine receptors such as CCR1 or CCR2 contain as the active ingredient N-acyl-amino acid N-cyclic amino or N-cyclic aminoalkyl-amide derivs. represented by general formula [I; (un)substituted Ph, C3-8 cycloalkyl, arom. heterocyclyl contg. 1-3 heteroatoms selected from O, S, and/or N; R2 = H, (un)substituted C1-6 alkyl, C2-7 alkoxycarbonyl, HO, (un)substituted Ph; p1, m1 = 0-2; m = 2-4; n = 0,1; R3 = H, (un)substituted C1-6 alkyl; R4, R5 = H, OH, (un)substituted Ph or C1-6 alkyl; or R4 and R5 are combined together to form a 3- to 5-membered hydrocarbyl; p, q = 0,1; G = CO, SO2, CO2, NR7CO, CONR7, NR7SO2, or SO2NR7, NHCONH, NHCSNH, NH CO2, O2CNH; R7 = H, C1-6 alkyl; or R7 and R5 are combined together to form C2-5 alkylene; R6 = (un)substituted Ph, C3-8

cycloalkyl, C3-6 cycloalkenyl, CH2Ph, or arom. heterocyclyl contg. 1-3 heteroatoms selected from O, S, and/or N, wherein Ph, CH2Ph, or arom. heterocyclyl group is optionally fused with (un)substituted benzene or arom. heterocyclyl contg. 1-3 heteroatoms selected from O, S, and/or N], pharmaceutically acceptable acid-adducts thereof, or pharmaceutically acceptable C1-6 alkyl-adducts thereof. The above diseases include destruction of bone or cartilage (e.g. arthritis, rheumatoid arthritis, osteoarthritis, osteoporosis, injury, and tumor), nephritis, kidney diseases, glomerulus or interstitial nephritis, nephrotic syndrome, demyelinating disease, or multiple sclerosis. Thus, N-3-ethoxybenzyl-D-methionine-N-[1-(4chlorobenzyl)-4-piperazinylmethyl]amide in vitro inhibited the binding of human MIP-1.alpha. to THP-1 cells by >80% at 2 .mu.M.

ICM A61K031-40 IC

- A61K031-422; A61K031-4439; A61K031-404; A61K031-4545; ICS A61K031-4525; A61K031-4535; A61K031-454; A61K031-427; A61K031-433; A61K031-4245; A61K031-4155; A61K031-5377; A61K031-4709; A61K031-506; A61K031-4184; A61K031-4178; A61K031-423; A61K031-4192; A61K031-445
- 34-2 (Amino Acids, Peptides, and Proteins) CC Section cross-reference(s): 1, 27, 28
- cyclic amine prepn binding inhibitor chemokine receptor; bone ST destruction disease preventive treatment acylamino acid amide; cartilage destruction disease preventive treatment acylamino acid amide
- IT Amides, preparation RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amino; prepn. of cyclic amine derivs. as remedies or preventives for diseases in assocn. with chemokines or chemokine receptors)

Musculoskeletal diseases IT

> (cartilage, destruction; prepn. of cyclic amine derivs. as remedies or preventives for diseases in assocn. with chemokines or chemokine receptors)

ΙT Amines, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process) (cyclic; prepn. of cyclic amine derivs. as remedies or preventives for diseases in assocn. with chemokines or chemokine receptors)

IT Nerve, disease

(demyelination; prepn. of cyclic amine derivs. as remedies or preventives for diseases in assocn. with chemokines or chemokine receptors)

IT Bone, disease

(destruction; prepn. of cyclic amine derivs. as remedies or preventives for diseases in assocn. with chemokines or chemokine receptors)

IT Cartilage

(disease, destruction; prepn. of cyclic amine derivs. as remedies or preventives for diseases in assocn. with chemokines or chemokine receptors)

IT Bone, disease

(injury; prepn. of cyclic amine derivs. as remedies or preventives for diseases in assocn. with chemokines or chemokine receptors)

> Searcher : Shears 308~4994

```
Kidney, disease
IT
        (interstitial nephritis; prepn. of cyclic amine derivs. as
        remedies or preventives for diseases in assocn. with chemokines
        or chemokine receptors)
ΙT
     Kidney, disease
        (nephritis; prepn. of cyclic amine derivs. as remedies or
        preventives for diseases in assocn. with chemokines or chemokine
        receptors)
IT
     Kidney, disease
        (nephrotic syndrome; prepn. of cyclic amine derivs. as remedies
        or preventives for diseases in assocn. with chemokines or
        chemokine receptors)
IT
     Antiarthritics
     Bone, neoplasm
     Kidney, disease
     Multiple sclerosis
     Osteoarthritis
     Osteoporosis
     Rheumatoid arthritis
        (prepn. of cyclic amine derivs. as remedies or preventives for
        diseases in assocn. with chemokines or chemokine receptors)
ΙT
     Chemokine receptors
     Chemokines
     Macrophage inflammatory protein 1.alpha.
     Monocyte chemoattractant protein-1
     RL: BPR (Biological process); BSU (Biological study, unclassified);
     MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
        (prepn. of cyclic amine derivs. as remedies or preventives for
        diseases in assocn. with chemokines or chemokine receptors)
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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of cyclic amine derivs. as remedies or preventives for diseases in assocn. with chemokines or chemokine receptors) 226235-98-9P 226235-99-0P 226236-00-6P 226236-01-7P

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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of cyclic amine derivs. as remedies or preventives for diseases in assocn. with chemokines or chemokine receptors) 226238-61-5P 226238-62-6P 226238-63-7P ΙT 226238-60-4P 226238-67-1P 226238-64-8P 226238-65-9P 226238-66-0P 226238-73-9P 226238-71-7P 226238-68-2P 226238-69-3P 226238-77-3P 226238-76-2P 226238-74-0P 226238-75-1P 226238-79-5P 226238-81-9P 226238-78-4P 226238-80-8P 226238-85-3P 226238-82-0P 226238-83-1P 226238-84-2P 226238-88-6P 226238-89-7P 226238-86-4P 226238-87-5P 226238-93-3P 226238-91-1P 226238-92-2P 226238-90-0P 226239-00-5P 226238-98-8P 226238-94-4P 226238-96-6P 226239-08-3P 226239-06-1P 226239-04-9P 226239-02-7P 226239-16-3P 226239-18-5P 226239-13-0P 226239-10-7P 226239-25-4P 226239-24**-**3P 226239-20-9P 226239-22-1P 226239-28**-**7P 226239-29-8P 226239-27-6P 226239-26-5P 226239-33-4P 226239-32-3P 226239-30-1P 226239-31-2P 226239-37-8P 226239-36-7P 226239-35-6P 226239-34-5P 226239-40-3P 226239-41-4P 226239-38-9P 226239-39-0P 226239-45-8P 226239-42-5P 226239-43-6P 226239-44-7P 226239-46-9P 226239-47-0P 226239-48-1P 226239-49-2P 226239-53-8P 226239-50-5P 226239-51-6P 226239-52-7P 226239-56-1P 226239-57-2P 226239-55-0P 226239-54-9P 226239-60-7P 226239-61-8P 226239-59-4P 226239-58-3P 226239-66-3P 226239-67-4P 226239-65-2P 226239-64-1P 226239-69-6P 226239-72-1P 226239-74-3P 226239-76-5P 226239-84-5P 226239-86-7P 226239-78-7P 226239-82-3P 226239-98-1P 226239-95-8P 226239-89-0P 226239-92-5P 226240-08-0P 226240-05-7P 226240-03-5P 226240-01-3P 226240-16-0P 226240-15-9P 226240-11-5P 226240-13-7P 226240-24-0P 226240-21-7P 226240-17-1P 226240-19-3P 226240-27-3P 226240-29-5P 226240-31-9P 226240-32-0P 226240-35-3P 226240-37-5P 226240-34-2P 226240-36-4P 226240-41-1P 226240-39-7P 226240-40-0P 226240-38-6P 226240-46-6P 226240-43-3P 226240-44-4P 226240-45-5P 226240-48-8P 226240-50-2P 226240-47-7P 226240-49-9P 226240-52-4P 226240-53-5P 226240-54-6P 226240-51-3P 226240-57-9P 226240-58-0P 226240-55-7P 226240-56-8P 226240-61-5P 226240-62-6P 226240-59-1P 226240-60-4P 226240-65-9P 226240-66-0P 226240-63-7P 226240-64-8P 226240-68-2P 226240-69-3P 226240-70-6P 226240-67-1P 226240-72-8P 226240-73-9P 226240-74-0P 226240-71-7P 226240-77-3P 226240-78-4P 226240-75-1P 226240-76-2P 226240-79-5P 226240-80-8P 226240-81-9P 226240-82-0P 226240-84-2P 226240-85-3P 226240-86-4P 226240-83-1P 226240-87-5P 226240-88-6P 226240-89-7P 226240-90-0P 226240-91-1P 226240-92-2P 226240-93-3P 226240-94-4P 226240-95-5P 226240-96-6P 226240-97-7P 226240-98-8P 226241-02-7P 226240-99-9P 226241-00-5P 226241-01-6P 226241-06-1P 226241-03-8P 226241-04-9P 226241-05-0P 226241-11-8P 226241-07-2P 226241-08-3P 226241-09-4P 226241-12-9P 226241-13-0P 226241-14-1P 226241-16-3P 226241-23-2P 226241-18-5P 226241-20-9P 226241-21-0P 226241-30-1P 226241-26-5P 226241-27-6P 226241-29-8P 226241-32-3P 226241-34-5P 226241-35-6P 226241-39-0P

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     (Uses)
        (prepn. of cyclic amine derivs. as remedies or preventives for
        diseases in assocn. with chemokines or chemokine receptors)
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        (prepn. of cyclic amine derivs. as remedies or preventives for
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(Biological study, unclassified); SPN (Synthetic preparation); THU
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(Uses)
   (prepn. of cyclic amine derivs. as remedies or preventives for
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(Uses)
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                                           94-99-5, 2,4-Dichlorobenzyl
75-65-0, tert-Butyl alcohol, reactions
           98-88-4, Benzoyl chloride
                                         100-10-7,
chloride
                                 100-39-0, Benzyl bromide
                                                              103-71-9,
4-(Dimethylamino)benzaldehyde
Phenyl isocyanate, reactions
                                104-83-6, 4-Chlorobenzyl chloride
104-87-0, 4-Methylbenzaldehyde
109-85-3, 2-Methoxyethylamine
                                  108-24-7, Acetic anhydride
                                 110-89-4, Piperidine, reactions
122-03-2, 4-Isopropylbenzaldehyde 122-51-0, Triet 393-82-8, 2,5-Bis(trifluoromethyl)benzoyl chloride
                                      122-51-0, Triethyl orthoformate
                                                        459-46-1,
                                                      589-15-1,
4-Fluorobenzyl bromide
                        495-69-2, Hippuric acid
                       619-84-1, 4-(Dimethylamino)benzoic acid
4-Bromobenzyl bromide
                                 621-59-0, 3-Hydroxy-4-
621-51-2, 3-Ethoxybenzoic acid
                       635-21-2, 2-Amino-5-chlorobenzoic acid
methoxybenzaldehyde
                                                      785-56-8,
712-97-0, 4,5-Methylenedioxy-2-nitrobenzaldehyde
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3,5-Bis(trifluoromethyl)benzoyl chloride
                                           824-42-0,
                                 938-71-6, 4-Chloro-2-nitrobenzyl
2-Hydroxy-3-methylbenzaldehyde
           947-91-1, 2,2-Diphenylacetaldehyde
                                                 1138-80-3
chloride
1200-14-2, 4-Butylbenzaldehyde
                                 1501-05-9, 4-Benzoylbutyric acid
1548-13-6, 4-(Trifluoromethyl)phenyl isocyanate
                                                   1592-20-7,
                         1877-72-1, m-Cyanobenzoic acid
                                                           1885-14-9,
4-Vinylbenzyl chloride
Phenyl chloroformate
                       2029-94-9, 3,4-Diethoxybenzaldehyde
2251-65-2, 3-(Trifluoromethyl)benzoyl chloride
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                                                           4530-20-5
4-Hydroxy-3-nitrobenzaldehyde
                                4138-26-5, Nipecotamide
4748-78-1, 4-Ethylbenzaldehyde
                                 5006-62-2, Nipecotic acid ethyl
                                                7697-26-9,
        7144-05-0, 4-(Aminomethyl)piperidine
3-Bromo-4-methylbenzoic acid
                              17794-48-8
                                            17966-67-5,
DL-N-Benzoylleucine
                     18942-49-9
                                   26386-88-9, Diphenyl phosphoryl
        27115-49-7, N-(3-Methylbenzoyl)glycine
                                                  29022-11-5,
azide
                                                          32863-31-3
              31680-07-6, 4-Methyl-3-nitrobenzaldehyde
Fmoc-Gly-OH
                                     41140-53-8, 3,3-Diphenylpropyl
35714-20-6, 4-Benzylbenzyl alcohol
                   50541-93-0, 4-Amino-1-benzylpiperidine
methanesulfonate
52606-02-7
             54895-12-4
                          54997-90-9, 4-Isopropylbenzenesulfonyl
           74483-45-7, 4-(Trifluoromethylthio)benzyl chloride
chloride
79636-94-5, 5-Bromo-2-ethoxybenzaldehyde
                                           83506-93-8,
2-Amino-4,5-difluorobenzoic acid
                                   85510-82-3, 4-Bromo-2-
fluorobenzyl chloride
                        89795-51-7, 2,1,3-Benzothiadiazole-5-
                        99724-19-3, 3-[(tert-
methanol
           96449-92-2
Butoxycarbonyl)amino]pyrrolidine
                                   115630-49-4, DL-Prolinamide
                              159689-88-0, 3-
                141940-29-6
hydrochloride
(Trifluoromethoxy) benzyl bromide
                                  171243-30-4, 3-Fluoro-5-
                                                  226250-01-7
(trifluoromethyl)benzoyl chloride
                                    226250-00-6
              308362-87-0
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            16588-34-4P, 4-Chloro-3-nitrobenzaldehyde
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671-42-1P
69154-03-6P
              144222-22-0P, 4-(Aminomethyl)-1-(tert-
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                               308362-87-0DP, reaction product with
4-formyl-3-(3-methoxyphenyloxymethyl)polystyrene
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308363-02-2DP, reaction product with 308363-00-0P 4-formyl-3-(3-methoxyphenyloxymethyl)polystyrene RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of cyclic amine derivs. as remedies or preventives for diseases in assocn. with chemokines or chemokine receptors) REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(ALL HITS ARE ITERATION INCOMPLETES)

133:89443 MARPAT ACCESSION NUMBER:

Quinolinecarboxamides as antiviral agents, TITLE:

especially against viruses of the herpes family Turner, Steven Ronald; Strohbach, Joseph Walter; INVENTOR(S):

Thaisrivongs, Suvit; Vaillancourt, Valerie A.;

Schnute, Mark E.; Tucker, John Alan

Pharmacia & Upjohn Company, USA PATENT ASSIGNEE(S):

PCT Int. Appl., 219 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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            AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
             CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
             ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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                                          US 1999-466712
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                                                              20010706
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PRIORITY APPLN. INFO.:
                                            US 1999-115301P
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                                            US 1999-140610P
                                                              19990623
                                            WO 1999-US27960
                                                              19991222
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$$R^4$$
 R^5
 R^6
 R^6
 R^8
 R^8

$$HO-CH_2-C\equiv C$$
 NH
 $C1$
 $Pr-i$
 II

AB The invention provides quinolinecarboxamides I (X = O, S; W = R2, etc., where R1-R6 = a wide variety of defined groups, with 125 examples), e.g., hydroxypropynyl deriv. II, and their pharmaceutically acceptable salts which are useful as antiviral agents, in particular, as agents against viruses of the herpes family. Activities of the compds. against HCMV, HSV, and VZV polymerase are presented. Pharmaceutical compns. comprising compds. I are claimed (no examples).

IC ICM C07D215-16

ICS C07D215-18; C07D215-22; C07D215-36; C07D215-38; C07D215-58; C07D215-233; A61K031-47; A61P031-12

CC 27-17 (Heterocyclic Compounds (One Hetero Atom))

Section cross-reference(s): 1, 63

ST quinolinecarboxamide prepn antiviral agent; herpes virus quinolinecarboxamide antiviral agent

IT Antiviral agents

(quinolinecarboxamides as antiviral agents)

IT Human herpesvirus 4

(quinolinecarboxamides for treatment of Epstein-Barr virus)

IT Cytomegalovirus

(quinolinecarboxamides for treatment of cytomegalovirus)

IT Human herpesvirus 1

(quinolinecarboxamides for treatment of herpes simplex virus type 1)

IT Human herpesvirus 2

(quinolinecarboxamides for treatment of herpes simplex virus type 2)

IT Human herpesvirus 6

(quinolinecarboxamides for treatment of human herpes virus type 6)

IT Human herpesvirus 7

(quinolinecarboxamides for treatment of human herpes virus type

IT Human herpesvirus

(quinolinecarboxamides for treatment of human herpes viruses)

IT Human herpesvirus 3

```
(quinolinecarboxamides for treatment of varicella zoster virus)
IT
     Amides, preparation
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (quinolinecarboxamides; prepn. of quinolinecarboxamides as
        antiviral agents)
     29943-42-8, Tetrahydro-4H-pyran-4-one
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (conversion to oxazepanone and for prepn. of quinolinecarboxamide
        derivs.)
     1072-72-6, Tetrahydrothiopyran-4-one
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (conversion to thiazepane)
     77771-02-9, 3-Bromo-4-fluorobenzaldehyde
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (for benzylation of morpholine)
     57-14-7, 1,1-Dimethylhydrazine
                                     75-26-3, 2-Bromopropane
                                                                87-13-8,
IT
     Diethyl ethoxymethylenemalonate
                                     100-11-8, 4-Nitrobenzyl bromide
     102-71-6, reactions 104-63-2, N-Benzylethanolamine
                                                            104-86-9,
     4-Chlorobenzylamine 106-93-4, 1,2-Dibromoethane
                                                        107-08-4,
                     107-19-7, Propargyl alcohol
                                                  110-65-6,
     1-Iodopropane
                      110-73-6
                                 110-77-0, Ethyl 2-hydroxyethyl sulfide
     1,4-Butynediol
     110-91-8, Morpholine, reactions 111-46-6, reactions
                                                            111-90-0,
     2-Ethoxy-(2-ethoxy)ethanol 112-35-6, Triethyleneglycol monomethyl
             140-75-0, 4-Fluorobenzylamine
                                             350-46-9,
     1-Fluoro-4-nitrobenzene 352-34-1, 4-Fluoroiodobenzene
                                                               505-10-2,
                                                     540-37-4,
                          513-48-4, 2-Iodobutane
     3-Methylthiopropanol
                    615-43-0, 2-Iodoaniline
                                               622-08-2,
     4-Iodoaniline
     2-Benzyloxyethanol
                         628-89-7, 2-(2-Chloroethoxy)ethanol
     2-Hydroxyethyl phenyl sulfide 881-95-8, dl-Metanephrine
                                                          1445-73-4,
                    927-74-2, 3-Butyn-1-ol
                                              1069-72-3
     hydrochloride
                            1479-24-9, Ethyl 3-(2-fluorophenyl)-3-
     N-Methyl-4-piperidone
                     2008-75-5, 1-(2-Chloroethyl)piperidine hydrochloride
     oxopropanoate
     2213-43-6, 1-Aminopiperidine
                                   2373-51-5, Chloromethyl methyl
               3647-69-6, N-(2-Chloroethyl) morpholine hydrochloride
                                                4261-68-1,
     3970-21-6, 2-Methoxyethoxymethyl chloride
                                                        4319-49-7,
     2-(Diisopropylamino)ethyl chloride hydrochloride
     4-Aminomorpholine 4584-46-7, Dimethylaminoethyl chloride
                     5188-07-8, Sodium thiomethoxide
                                                       5292-43-3,
     hydrochloride
                               5407-04-5, 3-Dimethylaminopropyl chloride
     tert-Butyl bromoacetate
                    5466-88-6, (2H)1,4-Benzoxazin-3(4H)-one 5472-49-1,
     hydrochloride
                                                  6148-64-7, Potassium
     N-(3-Chloropropyl)piperidine hydrochloride
     ethyl malonate
                    6542-54-7
                                  6589-55-5, .alpha.-
     (Methylaminomethyl)benzyl alcohol 6928-85-4, 1-Amino-4-
     methylpiperazine
                        6972-79-8, 1,3-Dibenzyloxy-2-propanol
     7205-90-5, Chloromethyl 4-chlorophenyl sulfide
                                                      7205-91-6,
     Chloromethyl phenyl sulfide
                                   7250-67-1, 1-(2-
     Chloroethyl)pyrrolidine hydrochloride
                                             10595-09-2,
                          16589-24-5, Synephrine 16596-41-1, 17201-43-3, 4-(Bromomethyl)benzonitrile
     3,3'-Thiodipropanol
     1-Aminopyrrolidine
     18621-18-6, 3-Azetidinol hydrochloride
                                             21151-56-4,
                                 26177-44-6, 4-Bromobenzylamine
     .alpha., 4-Dichloroanisole
                     27374-25-0, [(1-Ethoxycyclopropyl)oxy]trimethylsilan
     hydrochloride
         29632-74-4, 2-Fluoro-4-iodoaniline
                                             31560-06-2
                                                           33821-94-2,
                                             50586-80-6,
     2-(3-Bromopropoxy)tetrahydro-2H-pyran
     2-(2-Methoxyethoxy)ethyl p-toluenesulfonate
                                                   54288-69-6,
     2-Chloromethyl-1-methylpyrrolidine hydrochloride 58305-05-8
     72748-99-3, (R)-1-Amino-2-(methoxymethyl)pyrrolidine 79099-07-3,
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84466-87-5,
     1-(tert-Butoxycarbonyl)-4-piperidone
     4-(Azidomethyl)benzonitrile
                                   117924-33-1
                                                  121838-84-4
                   281652-58-2, 2-Chloro-5-iodobenzoyl chloride
     132091-42-0
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (for prepn. of quinolinecarboxamide derivs.)
     2767-70-6P, 4-Nitrobenzyltriphenylphosphonium bromide
                                                              5638-60-8P
ΙT
     6425-46-3P, 4-(4-Nitrobenzyl)morpholine
                                                10406-25-4P,
                                    21987-29-1P, 4,4-Difluoropiperidine
     4-(Aminomethyl)benzonitrile
     51013-67-3P, 4-(4-Aminobenzyl)morpholine
                                                 101184-85-4P
     124700-41-0P, 2-Fluoro-5-iodobenzoic acid
                                                  281651-96-5P,
                                    281652-00-4P
                                                   281652-01-5P
     N-Cyclopropyl-4-iodoaniline
                    281652-10-6P, tert-Butyl 4,4-difluoro-1-
     281652-05-9P
     piperidinecarboxylate
                             281652-11-7P, 4-Fluoro-1,2,3,6-
     tetrahydropyridine hydrochloride
                                         281652-25-3P,
                                             281652-26-4P
                                                            281652-27-5P
     4-(3-Bromo-4-fluorobenzyl)morpholine
     281652-40-2P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
        (for prepn. of quinolinecarboxamide derivs.)
     49713-42-0P, Ethyl 4-hydroxy-8-iodo-3-quinolinecarboxylate
IT
                                  188752-88-7P
                                                  228725-37-9P
     58287-31-3P
                   103318-52-1P
     228725-72-2P
                    228725-85-7P
                                    228726-33-8P
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                    228726-59-8P
                                    228726-66-7P
                                                   228726-92-9P
     228726-42-9P
     228726-93-0P
                    228728-08-3P
                                    228728-23-2P, Ethyl
     4-hydroxy-6-iodoquinoline-3-carboxylate
                                                228728-41-4P
                                    281651-91-0P
                                                   281651-92-1P
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     281652-09-3P
                                    281652-22-0P, 4-(4-
     281652-15-1P
                    281652-21-9P
     Nitrobenzylidene)tetrahydro-2H-pyran
                                             281652-23-1P
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                    281652-29-7P
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                                                   281652-31-1P
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     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
        (intermediate, for prepn. of quinolinecarboxamide derivs. as
        antiviral agents)
IT
     281652-16-2P
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                                    281652-18-4P
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        antiviral agents)
IT
     10341-26-1P
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     RACT (Reactant or reagent)
        (prepn. and hydride redn. to oxazepane)
     2896-98-2P
IT
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
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(prepn. and hydride redn. to thiazepane)
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ΙT
     281650-73-5P
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        (prepn. of quinolinecarboxamides as antiviral agents, esp.
        against herpes virus)
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        (prepn. of quinolinecarboxamides as antiviral agents, esp.
        against herpes virus)
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        (prepn. of quinolinecarboxamides as antiviral agents, esp.
        against herpes virus)
IT
     603-35-0, Triphenylphosphine, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (quaternization with nitrobenzyl bromide)
IT
     78191-00-1, N-Methyl-N-methoxyacetamide
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction with bromofluorobenzylmorpholine)
REFERENCE COUNT:
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THE RE FORMAT

L11 ANSWER 8 OF 15 MARPAT COPYRIGHT 2002 ACS

(ALL HITS ARE ITERATION INCOMPLETES)

ACCESSION NUMBER: 128:48222 MARPAT

TITLE: Preparation of diiminoimidazoimidazoles as granulocyte colony stimulating factor mimetics.

INVENTOR(S): Luengo, Juan I.; Chan, James A.; Breen, Ann L. PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA; Luengo,

Juan I.; Chan, James A.; Breen, Ann L.

SOURCE: PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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GI																

$$\begin{array}{c|c}
R^4N & & & & & \\
N & & & & \\
N & & & & \\
N & & & & \\
N & & & & & \\
N & & & \\
N & & & \\
N & & & & \\
N & & & \\
N$$

AB Title compds. [I; R1-R4 = (substituted) (polycyclic) (heterocyclic) aryl], were prepd. Thus, 2,2'-pyridil and 2-guanidinobenzimidazole were stirred 4 days in MeOH/aq. NaOH to give 72% I (R1, R2 = 2-pyridyl; R3, R4 = benzimidazol-2-yl). The latter showed

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activation above 150% of control between 1-32 .mu.M in a luciferase
     assay using NFS60 cells.
     ICM A61K031-415
IC
         C07D235-00
     ICS
     28-9 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
     Section cross-reference(s): 1, 63
     iminoimidazoimidazole prepn Gcsf mimetic; antibacterial
ST
     diiminoimidazoimidazole; antifungal diiminoimidazoimidazole;
     neutropenia treatment diiminoimidazoimidazole
ΙT
     Leukocyte
        (enhancement of leukocyte prodn.; prepn. of
        diiminoimidazoimidazoles as granulocyte colony stimulating factor
        mimetics)
     Agranulocytosis
TΤ
        (neutropenia, treatment; prepn. of diiminoimidazoimidazoles as
        granulocyte colony stimulating factor mimetics)
TT
     Antibacterial agents
     Fungicides
        (prepn. of diiminoimidazoimidazoles as granulocyte colony
        stimulating factor mimetics)
IT
     143011-72-7P, Gcsf
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (mimetics; prepn. of diiminoimidazoimidazoles as granulocyte
        colony stimulating factor mimetics)
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     199855-11-3P
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     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (prepn. of diiminoimidazoimidazoles as granulocyte colony
        stimulating factor mimetics)
                         492-73-9P, 2,2'-Pyridil
IT
     134-81-6P, Benzil
                                                    492-94-4P, 2,2'-Furil
     579-39-5P, 4,4'-DifluoroBenzil
                                      2582-07-2P,
                                                   2-
     Guanidinobenzothiazole
                              3457-48-5P, 4,4'-DimethylBenzil
                                                          7120-01-6P
                                             6630-11-1P
     5418-95-1P, 2-Guanidinobenzimidazole
                                                              35578-47-3P,
     7498-72-8P
                  13038-85-2P
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     4,4'-Dibromobenzil
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                                         39123-82-5P, 2-
                            40101-17-5P, 3,3'-DimethoxyBenzil
     Guanidinobenzoxazole
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                                                               70590-32-8P
     41926-59-4P
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                                  41927-06-4P
     73790-20-2P, 4,4'-Bis(trifluoromethyl)benzil
175136-87-5P 199853-99-1P 199855-19-1P
                                                     100599-91-5P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
        (prepn. of diiminoimidazoimidazoles as granulocyte colony
        stimulating factor mimetics)
```

L11 ANSWER 9 OF 15 MARPAT COPYRIGHT 2002 ACS

127:95142 MARPAT ACCESSION NUMBER:

Process for the preparation of cephalosporins TITLE:

via reductive dicarbonyl cyclization induced by

trialkyl phosphite of 4-thioazetidinone derivatives obtained from penicillins

Franceschi, Giovanni; Gargiuolo, Francesco; INVENTOR(S):

Orezzi, Piergiuseppe

3 Exo S.R.L., Italy; Franceschi, Giovanni; PATENT ASSIGNEE(S):

Gargiuolo, Francesco; Orezzi, Piergiuseppe

PCT Int. Appl., 56 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE									APPLICATION NO. DATE							
WO	97208													1996		
	W:													CN,		
		DE,	DK,	EE,	ES,	FI,	GB,	GE,	HU,	IL,	IS,	JP,	KΕ,	KG,	KΡ,	KR,
		KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,
														TR,	TT,	UA,
		UG,	US,	UZ,	VN,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM		
	RW:													FI,		
		GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GΑ,
		GN,	ML,	MR,	ΝE,	SN,	TD,	TG								
AU	97119	912		A:	1 :	1997	0627		A	J 19	97-1	1912		1996	1205	
EP	8763	77		A:	1 :	1998:	1111		El	P 19	96-9	4304	4	1996:	1205	
	R:	CH,	DE,	ES,	FR,	GB,	IT,	LI								
PRIORIT	Y APP	LN.	INFO	.:					I.	r 19:	95-M	1257	1	1995	1206	
									W) 19	96-E	P544	9	1996:	1205	

OTHER SOURCE(S):

CASREACT 127:95142

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AΒ The reductive cyclization induced by a trialkyl phosphite of .beta.-lactams I (A = protective group of the amino function, R1 = H, a cation or a protecting group of the carboxyl function, X = H, OH, OR2, -O-COR2, -OSO2R2, -S-COR2, where R2 is a hydrocarbon residue contg. 1 to 18 carbon atoms; -NR3R4, where R3 and R4, together with N, form a heterocycle; -CH2OR5, where R5 is a C1-C8 alkyl; -CH2-S-Het, where Het is a heterocycle; -CH=CHG, where G is H, a C1-C3 alkyl or a heterocycle Het2O; Y is = O or S, and X1 is defined as X1, provided that it is different from H and from a halogen) to give to cephalosporins II. Thus, Me

> Shears 308-4994 Searcher :

10/006579 6.beta.-(triphenylmethylamino)penicillanate was treated with BrCH2COSPh and Me3COK in THF and Me3COH to give 1-(1-methoxycarbonyl-2-methylprop-1-enyl)-4-(phenylthiocarbonylmethylthio)-3-(triphenylmethylamino)azetidine, which underwent ozonolysis followed by reductive cyclization with tri-Et phosphite give Me 7-(triphenylmethylamino)-3-(phenylthio)-3-cephem-4-carboxylate. ICM C07D501-00 ICS C07D205-095; A61K031-545 26-5 (Biomolecules and Their Synthetic Analogs) cephalosporin synthesis; reductive cyclization thioazetidinone Cyclization (reductive; prepn. of cephalosporins via reductive dicarbonyl cyclization induced by trialkyl phosphite of 4-thioazetidinone derivs. obtained from penicillins) 192049-45-9P 192049-46-0P 64919-77-3P 192049-48-2P 192049-52-8P 192049-54**-**0P 192049-55-1P 192049-51-7P 192049-58-4P RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of cephalosporins via reductive dicarbonyl cyclization induced by trialkyl phosphite of 4-thioazetidinone derivs. obtained from penicillins) 192049-50-6P 89779-47-5P 192049-47-1P 192049-53-9P 192049-56-2P 192049-57-3P RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) (prepn. of cephalosporins via reductive dicarbonyl cyclization induced by trialkyl phosphite of 4-thioazetidinone derivs. obtained from penicillins) 105-36-2, Ethyl bromoacetate 122-52-1, Triethyl phosphite 34103-69-0 53635-52-2 56377-57-2 21027-18-9 74503-07-4, Allyl oxalyl chloride 81779-73-9, 4-Nitrobenzyl oxalyl chloride 192049-49-3 RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. of cephalosporins via reductive dicarbonyl cyclization induced by trialkyl phosphite of 4-thioazetidinone derivs. obtained from penicillins)

L11 ANSWER 10 OF 15 MARPAT COPYRIGHT 2002 ACS

(ALL HITS ARE ITERATION INCOMPLETES)

ACCESSION NUMBER: 126:157289 MARPAT

TITLE: Benzamide derivatives and their use as

vasopressin antagonists

INVENTOR(S):

Setoi, Hiroyuki; Ohkawa, Takehiko; Zenkoh, Tatsuya; Sawada, Hitoshi; Sato, Kentaro; Tanaka,

· Hirokazu

PATENT ASSIGNEE(S):

Fujisawa Pharmaceutical Co., Ltd., Japan; Setoi, Hiroyuki; Ohkawa, Takehiko; Zenkoh, Tatsuya; Sawada, Hitoshi; Sato, Kentaro; Tanaka, Hirokazu

PCT Int. Appl., 322 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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KIND DATE APPLICATION NO. DATE PATENT NO. -----

WO	9641	795		A.	1	1996	1227		W	19	96-JI	P153	3	19960	0606	
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		ΚZ,	MD,	•	•											
	RW:		-	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,
		PT,	SE													
CA	22238	369		A	Ą	1996	1227		CZ	A 19	96-22	2238	69	19960	0606	
AU	96593	110		A.	1	1997	0109		Α	J 19	96-59	9110		19960	0606	
EP	8320	51		A:	1	1998	0401		El	? 19	96-93	1632	4	19960	0606	
EP	8320	51		B:	1	2001	0905									
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	PT,
		IE,	FI													
CN	1192	729		Α		1998	0909		Cì	N 19	96-19	9617	5	19960	0606	
JP	11508	3244		T	2	1999	0721		J	2 19	96-50	0289	6	19960	0606	
AT	20518	35		E		2001	0915		A.	r 19	96-93	1632	4	19960	0606	
ES	2159	738		T	3	2001	1016		ES	3 19	96-93	1632	4	19960	0606	
ZA	96048	395		Α		1996	1212		\mathbf{z}	A 19	96-48	395		19960	0607	
US	6054	157		Α		2000	0425		US	3 19	97-9	7310	3	19973	1209	
PRIORIT	Y APPI	LN.	INFO	. :					GI	3 19	95-13	1694		19950	0609	
				•					W	19	96-JI	P153	3	19960	0606	
GI																

$$R^{1}N-R^{2}$$
 R^{5}
 R^{7}
 $R^{$

The invention relates to new benzamide derivs. having vasopressin antagonistic activity, and to pharmaceutically acceptable salts thereof, processes for their prepn., and pharmaceutical compns. The compds. are represented by formula I [R1 = (un)substituted aryl, cycloalkyl, heterocyclyl; R2 = H, (un)substituted alkyl, cycloalkyl;

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R3 = H, halo, OH, (un) substituted acyloxy, alkyl, (cyclo) alkoxy,
NO2, amino, acyl; R4 = OH, halo, NO2, (un) substituted amino,
acyloxy, alkoxy, alkylthio, alk(en/yn)yl, etc; R5 = H, alkyl,
alkoxy, halo; A = bond, O, NH; E = alkylene, alkenylene, CO, SO2, etc.; X = CH:CH, CH:N, S; Y = CH, N]. Approx. 470 synthetic
examples of I and over 100 intermediates are described. For
instance, amidation of 2-(PhCH2O)C6H4CO2H with 4-
H2NC6H4CONMeC6H4[O(CH2)5CO2Et]-2 (prepn. given), followed by sapon.
of the ester, amidation with N-methylpiperazine, hydrogenolytic
debenzylation, etherification with N-(3-bromopropyl)phthalimide,
hydrazinolyis of the imide, and acidification, gave title compd. II
as the di-HCl salt (III). In assays for binding at human
vasopressin V1 receptors and cloned human V2 receptors in vitro, III
had IC50 values of 14 and 1400 nM, resp.
ICM C07C237-42
    C07C237-44; A61K031-165; A61K031-33; C07D295-18; C07D295-20;
ICS
     C07D211-58; C07D211-46; C07D213-80; C07D209-48; C07C271-16
25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1
benzamide prepn vasopressin antagonist; piperazine benzamide
antihypertensive vasodilator diuretic prepn
Ear
   (Meniere's disease, treatment; prepn. of benzamide derivs. as
   vasopressin antagonists)
Vasopressin receptors
RL: BPR (Biological process); BSU (Biological study, unclassified);
MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
   (V1; prepn. of benzamide derivs. as vasopressin antagonists)
Vasopressin receptors
RL: BPR (Biological process); BSU (Biological study, unclassified);
MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
   (V2; prepn. of benzamide derivs. as vasopressin antagonists)
Hormones, animal, preparation
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
   (antagonists, vasopressin antagonists; prepn. of benzamide
   derivs. as vasopressin antagonists)
Brain, disease
   (cerebrovascular, treatment; prepn. of benzamide derivs. as
   vasopressin antagonists)
Disease, animal
   (circulation disorder, treatment; prepn. of benzamide derivs. as
   vasopressin antagonists)
Circulation
   (disorder, treatment; prepn. of benzamide derivs. as vasopressin
   antagonists)
Heart, disease
Kidney, disease
   (failure, treatment; prepn. of benzamide derivs. as vasopressin
   antagonists)
   (inhibition of hepatic saccharide release; prepn. of benzamide
   derivs. as vasopressin antagonists)
Carbohydrates, biological studies
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL
(Biological study)
   (inhibition of hepatic saccharide release; prepn. of benzamide
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Searcher: Shears 308-4994

derivs. as vasopressin antagonists)

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ΙT
     Kidney
        (mesangium, inhibition of growth; prepn. of benzamide derivs. as
        vasopressin antagonists)
     Antidiabetic agents
TT
     Antihypertensives
     Cardiovascular agents
     Diuretics
     Platelet aggregation inhibitors
     Vasodilators
        (prepn. of benzamide derivs. as vasopressin antagonists)
ΙT
     Ascites
     Cirrhosis
     Edema
     Motion sickness
        (treatment; prepn. of benzamide derivs. as vasopressin
        antagonists)
ΙT
     50-56-6, Oxytocin, biological studies
     RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL
     (Biological study)
        (antagonists; prepn. of benzamide derivs. as vasopressin
        antagonists)
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     7440-09-7, Potassium, biological studies
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological
     study)
        (hypokalemia; treatment; prepn. of benzamide derivs. as
        vasopressin antagonists)
     7440-23-5, Sodium, biological studies
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     RL: ADV (Adverse effect, including toxicity); BIOL (Biological
     study)
        (hyponatremia; treatment; prepn. of benzamide derivs. as
        vasopressin antagonists)
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     186663-81-0P
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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
        (intermediate; prepn. of benzamide derivs. as vasopressin
        antagonists)
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     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (prepn. of benzamide derivs. as vasopressin antagonists)
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L11 ANSWER 11 OF 15 MARPAT COPYRIGHT 2002 ACS
(ALL HITS ARE ITERATION INCOMPLETES)
                          125:328306 MARPAT
ACCESSION NUMBER:
                          Preparation of benzamide derivatives as
TITLE:
                          vasopressin antagonists
                         Setoi, Hiroyuki; Ohkawa, Takehiko; Zenkoh,
INVENTOR(S):
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308-4994 Searcher : Shears

Tatsuya; Hemmi, Keiji; Tanaka, Hirokazu Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 281 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PAT	ENT N	ю.		KI	ND	DATE			Al	PPLI	CATI	ON NO	ο.	DATE		
WO	 95291	.52		A	 1	1995	1102		W	 D 19	95-J	P788		1995	0421	
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	KW:	SE	BE,	CH,	DE,	DK,	ES,	rk,	GD,	GK,	ır,	11,	ьυ,	MC,		r1,
AU	95226	74		A.	1	1995	1116		ΙA	J 19	95-2	2674		1995	0421	
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EP	75767	0	•	B	1	1999	0113									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	ΙT,	LI,	LU,	NL,	PT,
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AT	17566	51		E		1999	0115		A.	г 19	95-9	1602	3	1995	0421	
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PRIORITY	APPI	N.	INFO	. :					GI	3 19	94-83	185		1994	0425	
									W	19	95-J	P788		1995	0421	
GI																

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$$0 \xrightarrow{NR^1R^2} \underset{X}{\overset{H}{\longrightarrow}} \underset{0}{\overset{H}{\longrightarrow}} R^4$$

Title compds. [I; (cyclo)alkyl, aryl, heterocyclyl, etc.; R2 = (cyclo)alkyl, arylalkyl, etc.; R3 = H, halo, alkyl, alkoxy, etc.; R4 = alkyl, (un)substituted aryl; X,Y = CH or N] were prepd. Thus, PhNHMe was amidated by 4-(O2N)C6H4COCl and the reduced product amidated by 4-MeC6H4C6H4(CO2H)-2 to give title compd. II. Data for in vitro vasopressin antagonism by I were given.

ΙI

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     ICM C07C237-42
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          CO7D213-81; CO7D213-82; A61K031-165; A61K031-44
     25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
CC
     Section cross-reference(s): 1
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     183494-78-2P
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (prepn. of benzamide derivs. as vasopressin antagonists)
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     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (prepn. of benzamide derivs. as vasopressin antagonists)
                           95-53-4, 2-Methylaniline, reactions
                                                                  100-39-0,
ΙT
     75-65-0, reactions
                      100-60-7, N-Methylcyclohexylamine
                                                            100-61-8,
     Benzyl bromide
                                   104-94-9, p-Anisidine
                                                            105-36-2, Ethyl
     N-Methylaniline, reactions
                    109-01-3, 1-Methylpiperazine
                                                     120-92-3,
     bromoacetate
                      122-04-3, p-Nitrobenzoyl chloride
     Cyclopentanone
                                                            137-07-5,
                          611-21-2, N-Methyl-o-toluidine
                                                            933-88-0,
     2-Aminothiophenol
                           1074-82-4, Potassium phthalimide
                                                               1885-14-9,
     o-Toluoyl chloride
                                                            6294-17-3,
                             2835-98-5, 6-Amino-m-cresol
     Phenyl chloroformate
     1-Bromo-6-chlorohexane
                               7148-03-0, 4'-Methylbiphenyl-2-carboxylic
            17814-85-6, (4-Carboxybutyl)triphenylphosphonium bromide
     25542-62-5, Ethyl 6-bromohexanoate
                                           29943-42-8,
                                  57479-71-7, 2-Benzyloxy-4-chlorobenzoic
     Tetrahydro-4H-pyran-4-one
     acid
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RL: RCT (Reactant); RACT (Reactant or reagent)
        (prepn. of benzamide derivs. as vasopressin antagonists)
IT
     784-94-1P
                 961-61-5P, N-Methyl-N-phenyl-4-nitrobenzamide
                  1742-15-0P, N-(2-Acetylphenyl)-4-nitrobenzamide
     1092-52-0P
                                                         2585-29-7P,
     2585-28-6P, N-(2-Chlorophenyl)-4-nitrobenzamide
                                            2585-30-0P,
     N-(3-Chlorophenyl)-4-nitrobenzamide
                                            3416-83-9P
                                                          3623-89-0P
     N-(4-Chlorophenyl)-4-nitrobenzamide
                                             7498-40-0P,
     5405-13-0P, N-Benzyl-2-methylaniline
                                       13313-18-3P, N-(3-Pyridyl)-4-
     N-(2-Pyridyl)-4-nitrobenzamide
                      17517-17-8P, N-Benzyl-N-(2-Methylphenyl)-4-
     nitrobenzamide
     nitrobenzamide
                      24730-11-8P, N-(4-Methoxyphenyl)-4-nitrobenzamide
     36855-81-9P, N-(2-Methylphenyl)-4-nitrobenzamide
                                                          38909-96-5P,
     N-Ethyl-N-phenyl-4-nitrobenzamide
                                          64594-44-1P,
                                                65270-05-5P,
     N-(2,6-DiMethylphenyl)-4-nitrobenzamide
                                                         91099-19-3P,
                                          66809-90-3P
     N-EThyl-N-Phenyl-4-aminobenzamide
                                             96830-01-2P,
     N-(3-Methoxyphenyl)-4-nitrobenzamide
                                                99642-26-9P
                                                               107480-72-8P
     N-Methyl-N-(2-pyridyl)-4-nitrobenzamide
     109691-95-4P, N-(2-Biphenylyl)-4-nitrobenzamide
                                                        110648-14-1P,
                                                     112290-16-1P
     N-(2-Methylphenyl)-3-methyl-4-nitrobenzamide
                    169945-49-7P, N-(2-TrifluoroMethylphenyl)-4-
     168151-96-0P
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                      183495-91-2P
     nitrobenzamide
                                       183495-93-4P
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                                                             183495-96-7P
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                                                    183496-05-1P
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     N-(2-Methylphenyl)-3-methoxy-4-nitrobenzamide
                                    183496-26-6P, N-Methyl-N-(2-
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     183496-24-4P
                                       183496-27-7P, N-Methyl-N-(2-
     acetylphenyl)-4-nitrobenzamide
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                                                     183496-35-7P,
     N-Methyl-N-(2-Chlorophenyl)-4-aminobenzamide
     N-Methyl-N-(4-methylphenyl)-4-aminobenzamide
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183497-21-4P 183497-22-5P 183497-20-3P 183497-19-0P 183497-24-7P 183497-25-8P 183497-26-9P 183497-23-6P 183497-29-2P 183497-30-5P 183497-27-0P 183497-28-1P 183497-33-8P 183497-34-9P 183497-32-7P 183497-31-6P 183497-37-2P 183497-38-3P 183497-36-1P 183497-35-0P 183497-41-8P 183497-42-9P 183497-40-7P 183497-39-4P 183497-44-1P 183497-45-2P 183497-46-3P 183497-43-0P 183497-49-6P 183497-50-9P 183497-47-4P 183497-48-5P 183497-52-1P 183497-54-3P 183497-55-4P, 183497-51-0P 183497-57-6P 2-Benzyloxy-4-chloro-N-methylaniline 183497-56-5P 183497-60-1P 183497-61-2P 183497-58-7P 183497-59-8P 183497-64-5P 183497-65-6P 183497-63-4P 183497-62-3P 183497-66-7P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. of benzamide derivs. as vasopressin antagonists)

L11 ANSWER 12 OF 15 MARPAT COPYRIGHT 2002 ACS

Ι

(ALL HITS ARE ITERATION INCOMPLETES)

124:176158 MARPAT ACCESSION NUMBER:

Preparation of thienothiadiazinesulfonamides as TITLE:

carbonic anhydrase inhibitors

Dean, Thomas R.; Namil, Abdelmoula INVENTOR(S):

Alcon Laboratories, Inc., USA PATENT ASSIGNEE(S):

U.S., 9 pp. SOURCE:

CODEN: USXXAM

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE _____ ______ 19951107 US 1994-303900 19940909 US 5464831 Α OTHER SOURCE(S): CASREACT 124:176158 GI

SO2NH2

AB Title compds. I $\{R1 = H, (substituted) C1-6 alkyl, C1-4 alkoxy, \}$ etc.; R2 = H, (substituted) C1-8 alkyl, C1-4 alkoxy, etc.], useful in reducing the intraocular pressure, were prepd. and formulated. Treatment of I (R1 = Me; R2 = H) with NaH in DMF followed by addn. of N-(2-chloroethyl)morpholine HCl afforded 71% compd. I [R1 = Me; R2 = 2-morpholinoethyl] which was formulated in topical opthalmic gel and suspension at 1 wt.% and 2 wt.%, resp.

ICM C07D513-04 IC ICS A61K031-54

```
NCL 514222800
     28-20 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
     Section cross-reference(s): 1, 63
     thienothiadiazinesulfonamide prepn; carbonic anhydrase inhibitor
ST
     thienothiadiazinesulfonamide prepn; intraocular hypertension
     thienothiadiazinesulfonamide prepn; glaucoma
     thienothiadiazinesulfonamide prepn; alkylation
     thienothiadiazinesulfonamide chloroethylmorpholine hydrochloride
IT
     Alkylation
     Glaucoma (disease)
        (prepn. of thienothiadiazinesulfonamides as carbonic anhydrase
        inhibitors)
ΙT
     173772-91-3P
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     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (prepn. of thienothiadiazinesulfonamides as carbonic anhydrase
        inhibitors)
IT
     9001-03-0, Carbonic anhydrase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (prepn. of thienothiadiazinesulfonamides as carbonic anhydrase
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                           13250-82-3
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     78-77-3
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     RL: RCT (Reactant); RACT (Reactant or reagent)
        (prepn. of thienothiadiazinesulfonamides as carbonic anhydrase
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     103011-38-7P
                   173772-99-1P
     173772-98-0P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
        (prepn. of thienothiadiazinesulfonamides as carbonic anhydrase
        inhibitors)
L11 ANSWER 13 OF 15 MARPAT COPYRIGHT 2002 ACS
(ALL HITS ARE ITERATION INCOMPLETES)
                         123:198800 MARPAT
ACCESSION NUMBER:
                         Preparation of [(azacyclomethyl)heterocyclyl]alk
TITLE:
                         anoates and analogs as angiotensin II receptor
                         antagonists
                         Carpino, Philip A.; Larson, Eric R.; Mylari,
INVENTOR(S):
                         Banavara L.
PATENT ASSIGNEE(S):
                         USA
SOURCE:
                         PCT Int. Appl., 70 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO.
                                                             DATE
                            _----
     _____
                      ----
                      A1 19950126
                                            WO 1994-IB187
                                                             19940701
     WO 9502596
         W: AU, BG, BR, BY, CA, CN, CZ, HU, JP, KR, KZ, LV, NO, NZ, PL,
             RO, RU, SK, UA, US, UZ
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
     AU 9469794
                       A1
                             19950213
                                            AU 1994-69794
                                                             19940701
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FI 9403359	Α	19950116	FI	1994-3359	19940714
BR 9500208	Α	19970114	BR	1995-208	19950113
US 5789415	Α	19980804	US	1996-569133	19960111
PRIORITY APPLN.	INFO.:		US	1993-92349	19930715
			WO	1994-IB187	19940701

GI

AB RCH2ZCR1R2R3 [I; R = azacyclyl group; R1,R2 = H, OH, alkyl, Ph, etc.; R1R2 = atoms to complete a (heterocyclic) ring; R3 = CHO, CO2H, CH2OH, tetrazolyl, etc.; Z = naphthylene, heterocyclylene, etc.] were prepd. Thus, Et 2-thienylacetate was cyclocondensed with cis-ClCH2CH:CHCH2Cl and the product formylated to give, in 2 addnl. steps, Et 1-(5-chloromethyl-2-thienyl)cyclopent-3-enecarboxylate which was condensed with 2-ethyl-5,7-dimethylimidazo[4,5-b]pyridine to give, after sapon., title compd. II. I had IC50 of .ltoreq.10-5M against SARILE AII binding at rat liver prepn. in vitro.

IC ICM C07D471-04

ICS A61K031-415; C07D409-06; C07D401-06; C07D407-06; C07D405-06; C07D405-14

ICI C07D471-04, C07D235-00, C07D221-00

CC 28-9 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 1

ST azacyclomethylheterocyclylalkanoate prepn angiotensin II receptor antagonist; antihypertensive azacyclomethylheterocyclylalkanoate prepn

IT Antihypertensives

(prepn. of [(azacyclomethyl)heterocyclyl]alkanoates and analogs as angiotensin II receptor antagonists)

IT Glaucoma (disease)

Kidney, disease

(treatment; prepn. of [(azacyclomethyl)heterocyclyl]alkanoates
and analogs as angiotensin II receptor antagonists)

IT Receptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(angiotensin II, prepn. of [(azacyclomethyl)heterocyclyl]alkanoat es and analogs as angiotensin II receptor antagonists)

IT Mental disorder

(cognitive, treatment; prepn. of [(azacyclomethyl)heterocyclyl]al kanoates and analogs as angiotensin II receptor antagonists)

IT Heart, disease

(failure, treatment; prepn. of [(azacyclomethyl)heterocyclyl]alka noates and analogs as angiotensin II receptor antagonists)

IT 167984-50-1P

RL: BAC (Biological activity or effector, except adverse); BSU

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(Biological study, unclassified); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (prepn. of [(azacyclomethyl)heterocyclyl]alkanoates and analogs
        as angiotensin II receptor antagonists)
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                    167984-49-8P
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     167984-48-7P
                                                   167984-57-8P
     167984-53-4P
                    167984-54-5P
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                                   167984-60-3P
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                                   167984-72-7P
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     167984-74-9P
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (prepn. of [(azacyclomethyl)heterocyclyl]alkanoates and analogs
        as angiotensin II receptor antagonists)
                                   111-44-4, 1-Chloro-2-(2-
IT
     110-56-5, 1,4-Dichlorobutane
                           553-86-6, 3H-Benzofuran-2-one
                                                            589-93-5,
     chloroethoxy) ethane
                    612-12-4, .alpha.,.alpha.'-Dichloro-o-xylene
     2,5-Lutidine
                                    1476-11-5, cis-1,4-Dichloro-2-butene
     628-76-2, 1,5-Dichloropentane
     1530-45-6, (Ethoxycarbonylmethyl)triphenylphosphonium bromide
     5156-83-2, 1-(6-Methyl-2-naphthyl)ethanone
                                                   5472-38-8, Diethyl
                       6340-91-6, Propylhydrazine oxalate
                                                             40711-41-9,
     formylsuccinate
     Butylhydrazine oxalate
                              57382-97-5, Ethyl 2-thienylacetate
     124750-49-8
                   133240-06-9, 2-Ethyl-5,7-dimethylimidazo[4,5-
                                135070-89-2, 2-Propyl-5,7-
                  134603-88-6
     b]pyridine
     dimethylimidazo[4,5-b]pyridine
                                       135070-90-5, 2-Cyclopropyl-5,7-
     dimethylimidazo[4,5-b]pyridine
                                       136540-89-1
                                                     138733-41-2, Ethyl
                                     167984-55-6
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     2-methoxyimino-4-oxooctanoate
     167985-35-5, 2,2,2-Trifluoroethylhydrazine oxalate
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     RL: RCT (Reactant); RACT (Reactant or reagent)
        (prepn. of [(azacyclomethyl)heterocyclyl]alkanoates and analogs
        as angiotensin II receptor antagonists)
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                  21823-22-3P
                                54634-97-8P
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ΤТ
     5552-82-9P
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     167985-33-3P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
        (prepn. of [(azacyclomethyl)heterocyclyl]alkanoates and analogs
        as angiotensin II receptor antagonists)
L11 ANSWER 14 OF 15 MARPAT COPYRIGHT 2002 ACS
(ALL HITS ARE ITERATION INCOMPLETES)
```

ACCESSION NUMBER: 121:205797 MARPAT

Preparation and formulation of TITLE:

17-acylandrosta-3,5-diene-3-carboxylates as

steroid 5.alpha.-reductase inhibitors Holt, Dennis Alan; Levy, Mark Alan

INVENTOR(S): SmithKline Beckman Corp., USA PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 69 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	TENT	NO.		KI	ND	DATE			A:	PPLI	CATI	N NC	o. 	DATE		
	9411									0 19	93-U	S112	41	1993	1118	
		ΑU,	BB,	BG,	BR,	BY,	CA,	CZ,	FI,	HU,	JP,	KP,	KR,	ΚZ,	LK,	LV,
														UZ,		
	RW:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙĖ,	ΙΤ,	LU,	MC,	NL,	PT,
		SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	ML,	MR,	ΝE,	SN,	TD,	TG
ZA	9308	538		Α		1994	0913		\mathbf{z}_{i}	A 19	93-8	538		1993	1116	
ZA	9308	540		Α		1994	0913		\mathbf{z}	A 19	93-8	540		1993	1116	
CA	2149	427		A	A	1994	0526		C	A 19	93-2	1494	27	1993	1118	
AU	9456	717		A	1	1994	0608		A	U 19	94-5	6717		1993	1118	
CN	1101	914		Α		1995	0426		C	N 19	93-1	1477	5	1993	1118	
CN	1101	916		Α		1995	0426		C	N 19	93-1	2143	4	1993	1118	
	6699															
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	IT,	LI,	LU,		NL,
	0850 5641	PT.	SE	•	•	•	•	•	-							
JР	0850	3474		T	2	1996	0416		J	P 19	93-5	1250	7	1993	1118	
US	5641	765		Α	_	1997	0624		U	s 19	95-4	3624	0	19950	0517	
	5641													19950	0530	
PRIORIT									G			4213		1992	1118	
INIONII	1 111 1		11110	• •					G			6954		19930	0814	
												S112		1993		
												3624		19950		
									0.	U 1)	J	0024	•			

GI

Title compds. [I; A = (satd.) hydrocarbylene; R = substituted alkyl, AΒ (un) substituted cycloalkyl, -heterocyclyl, -(hetero)aryl] were prepd. Thus, androst-4-en-3-one-17.beta.-carboxylic acid was converted in 4 steps to 17.beta.-(phenethylcarbonyl)androsta-3,5-

Ι

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diene-3-carboxylic acid. I had Ki of 2-85 and 0.2-7nM against
     isoenzyme 1 and 2 of steroid 5.alpha.-reductase, resp.
     ICM C07J003-00
IC
         C07J005-00; C07J007-00; C07J009-00; C07J015-00; C07J017-00;
     ICS
          C07J033-00; C07J041-00; C07J043-00; C07J075-00
CC
     32-4 (Steroids)
     Section cross-reference(s): 1, 63
ST
     acylandrostadienecarboxylate prepn steroid reductase inhibitor
IT
     Prostate gland
        (disease, prostatitis, treatment of,
        acylandrostadienecarboxylates for)
IT
     Alopecia
        (male pattern, treatment of, acylandrostadienecarboxylates for)
IT
     Prostate gland
        (neoplasm, adenocarcinoma, treatment of,
        acylandrostadienecarboxylates for)
     9081-34-9, 5.alpha.-Steroid reductase
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (inhibitors of, acylandrostadienecarboxylates as)
ΙT
     139755-35-4P
                    139755-36-5P
                                   146175-29-3P
                                                  156699-24-0P
                                   156699-33-1P
                                                  157977-50-9P
                    156699-30-8P
     156699-29-5P
                                   157977-53-2P
                                                  157977-54-3P
                    157977-52-1P
     157977-51-0P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
        (prepn. and reaction of, in prepn. of steroid 5.alpha.-reductase
        inhibitor)
                                                  157977-42-9P
                    157977-40-7P
                                   157977-41-8P
IT
     156699-35-3P
                                                  157977-46-3P
                                   157977-45-2P
                    157977-44-1P
     157977-43-0P
                                   157977-49-6P
                    157977-48-5P
     157977-47-4P
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); SPN (Synthetic preparation); BIOL
     (Biological study); PREP (Preparation)
        (prepn. of, as steroid 5.alpha.-reductase inhibitor)
     302-97-6, Androst-4-en-3-one-17.beta.-carboxylic acid
                                                              1462 - 75 - 5,
IΤ
     3-Phenylpropylmagnesium bromide
                                       2127-03-9, 2,2'-Dipyridyl
                 3277-89-2, Phenethylmagnesium bromide
     disulfide
                                                          6921-34-2
                               35166-78-0, Cyclohexylmethylmagnesium
     Benzylmagnesium chloride
              36278-54-3, 2-(4-Methoxyphenyl)ethylmagnesium bromide
     bromide
     55766-17-1, 2-Cyclohexylethylmagnesium bromide
                                                      119169-78-7
                   157977-55-4
     126201-52-3
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, in prepn. of steroid 5.alpha.-reductase inhibitor)
L11 ANSWER 15 OF 15 MARPAT COPYRIGHT 2002 ACS
(ALL HITS ARE ITERATION INCOMPLETES)
ACCESSION NUMBER:
                         116:13416 MARPAT
                         Pressure- and heat-sensitive recording materials
TITLE:
                         with good sensitivity, storability and image
                         stability
                         Sano, Masajiro; Takashima, Masanobu; Satomura,
INVENTOR(S):
                         Masato
PATENT ASSIGNEE(S):
                         Fuji Photo Film Co., Ltd., Japan
                         Jpn. Kokai Tokkyo Koho, 11 pp.
SOURCE:
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
                         Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
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	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
АВ	electron-donating amine residue-commonovalent group	als ut ng leuc ontg. a o; R5 = g 4- to	ilizes coloration dye Ar1R1CH:Color heterocy aryl group-control 12-membered risks	ion by contact bet CR2:CH:CHR3CR4R5Ar yclic group; R1-4 ntg. alkoxy group; ings with or withc	ween 2 (Ar1, Ar2 = = H, R1-4 may bond
IC	ICM B41M005-136		on-accepting co	mpa.	
CC	74-7 (Padiation	, Chemic	try Photochemi	istry, and Photogr	aphic and
CC	Other Reprograph			iscij, dna inecegi	up20 ua
ST				aterial; pressure	sensitive
01				ecording material	
ΙT	Dyes, cyanine	,			
		s, in	heat- and press	sure-sensitive rec	ording
				storability and im	
ΙT	Copying paper	_	•		
	(pressure-ser	nsitive	, polymethine o	color formers for,	with good
			ility and image	e stability)	
ΙT	Recording materi				
				rs for, with good	sensitivity,
	storability a	and ima	ge stability)		07600 22 6
ΙT				outylamino)fluoran	9/628-33-6
	118063-66-4 13	3/892-1	.0-5		
	RL: USES (Uses)	a cont	a nolumethines	s and, for heat- a	and
	COIOI IOIMEI	sitivo	recording mate	riale)	iii Q
ΙT	137759-32-1 13				
	RL: USES (Uses)	,,,,,,		-	
		s, in	heat- and press	sure-sensitive rec	cording
	materials wit	h good	l sensitivity, s	storability and im	age stability)
ΙT	100-51-6, Benzyl	Laĺcoh	ol, uses 1188	316-17-4	
	RL: USES (Uses)				
				- and pressure-sen	sitive
	recording mat	erials	:)		
			IDDD 3M 1E.00 01	1 ON 02 OCT 2002	
т 4	FILE 'MARPATPREV	ENTE	KED AT 15:00:21	I ON U3 OCT 2002	
L4	STR				

VAR G1=18/21
VAR G2=H/CH2
REP G3=(1-6) C
VAR G4=29/31/33
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 8
GGCAT IS UNS AT 19
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS E4 C E1 O AT 27

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 33

STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME: ECLEVEL IS LIM ON ALL NODES ALL RING(S) ARE ISOLATED

L12 0 SEA FILE=MARPATPREV SSS FUL L4 (MODIFIED ATTRIBUTES)

100.0% PROCESSED 4 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FILE 'HOME' ENTERED AT 15:00:40 ON 03 OCT 2002